RURAL SCHOOL SURVEY *of* NEW YORK STATE

FINANCIAL SUPPORT

JOINT COMMITTEE ON RURAL SCHOOLS

State Grange

G. W. DUNN MRS. F. GATES
G. C. McNINCH

Department of Education

F. B. GILBERT R. P. SNYDER
G. M. WILEY

Dairymen's League

E. R. EASTMAN, Secretary ALBERT MANNING
N. F. WEBB

Farm Bureau Federation

H. C. McKENZIE, Vice-Chairman W. G. McINTOSH
C. S. POST H. G. REED

State College of Agriculture

J. E. BUTTERWORTH P. J. KRUSE
G. A. WORKS, Chairman

Home Bureau Federation

MRS. M. E. ARMSTRONG MRS. A. E. BRIGDEN
MRS. EDWARD YOUNG

State Teachers' Association

J. D. JONES MYRTLE E. MacDONALD
W. E. PIERCE

Committee on Direction

G. A. WORKS, Director
MRS. A. E. BRIGDEN, Assistant Director
G. M. WILEY, Assistant Director

RURAL SCHOOL SURVEY *of* NEW YORK STATE

FINANCIAL SUPPORT

By

HARLAN UPDEGRAFF

PROFESSOR OF EDUCATIONAL ADMINISTRATION
UNIVERSITY OF PENNSYLVANIA

Ithaca, New York
1922

WM. F. FELL CO. PRINTERS
PHILADELPHIA

FOREWORD

ONE of the most significant educational problems of the day is the relationship of the state to the support of schools. Two factors have been especially important in bringing it to the fore so far as it relates to the rural school.

There has been a marked increase during the past generation in the cost of schools. A part of this increase is due to the fact that young people are attending school for considerably longer periods, and the educational program that is made available to them is much more varied than it was formerly. A further factor in augmenting expenses is the fact that the cost of elements involved in running an effective school system has grown greatly. The standards for admission to the teaching profession are constantly being raised thus resulting in longer periods of preparation and higher salaries for teachers. The expense involved in this phase of the question has been greatly augmented in recent years by the rapid growth in secondary school population.

During the period when the costs in education have been mounting so rapidly we have changed from a rural to an urban nation with cities as our great centers of wealth. As a result of these two changes the farmer is today placed at a distinct disadvantage when it comes to furnishing schools of the extent and quality that present-day standards demand. A century ago, when we were essentially a rural people, when but little schooling was considered necessary, and when there was relatively little aggregation of wealth in the urban centers, the farmer could handle his school problems with little or no financial assistance from the state. The extent to which he can cope unaided with them today undoubtedly varies from state to state, but the inadequacy of a system of state support that was devised for very different conditions than those of the present are

well set forth as a result of Dr. Updegraff's study of conditions in New York. His study is so fundamental and his recommendations so sound that they can hardly fail to influence legislation relating to school support not only in New York but in every state.

A grant from the Commonwealth Fund made possible the research represented by this report as well as the printing of the findings.

GEO. A. WORKS,
Director

PREFACE

THIS survey of the financial aspects of the administration of the rural schools of New York was undertaken at the request of "The Committee of Twenty-one," representing four state-wide farmers' organizations; the State Department of Education, the New York State Teachers' Association, and the Rural Education Department of Cornell University. It was begun in February, 1921, and almost completed by December of that year, at which time a condensed report of the facts and recommendations was submitted to the Committee. That report, except for certain changes in the recommendations, was printed by "The Joint Committee on Rural Schools" as Chapter XIII of its "Rural School Survey of New York," published in January, 1922. This present volume, on the other hand, contains the complete survey study and is printed in the same form as prepared by the author without amendment by the Committee.

In so far as the local aspects of the financial problems are concerned, the study has been confined to the common school and union free school districts. But inasmuch as the financial administration of rural schools unavoidably involves state financial support, and inasmuch as all classes of districts must be taken into consideration in the formation of a policy of state support of schools, it was necessary to include also such data for cities and villages as would furnish adequate information relative to unit costs, property valuations, and tax-rates of such districts.

Data from other states have been included to only a limited degree: first, because there seemed to be but little material available that was recent and comparable; and second, because the method of study adopted required not only an intensive scientific study of all sides of the question in this one State, but also the determina-

tion of a solution that would fit the actual situations therein. Such a method is believed superior to the usual comparative method of utilizing data from several or many states, which necessarily present different conditions foreign to the one surveyed.

Since the most important fact revealed by the study was the great differences among the various rural school districts, whether organized as common school districts, as townships, or as community districts, both in their ability and in their desire to support good schools, the organization of the material has seemed inevitably to take that form which seemed best adapted to show the ways in which central, or state, support might be used so as to obviate the effects of these deficiencies wherever and so long as they existed, and to remove the causes thereof as soon as possible. Thus, from this point of view the study may be considered as having as a minor theme the state support of local schools.

The author has had considerable difficulty in determining which tables to incorporate in the text, which to put into the Appendix, and which to omit altogether. The basis for the final decision adopted was—(1) to take out of the text those tables which, although logically belonging to it, but because of their number or size, would interfere with its facile reading; (2) put into the Appendix all of these tables thus excluded and also such others as it seemed necessary to include in order to show that correct scientific methods had been followed; and (3) to omit all other tables. (The essential summaries of these omitted tables are, however, contained in the printed tables.)

The recommendations of this study will be found to differ with those found in Chapter XIII of the Joint Committee's Survey referred to above in certain other points than those affected by the Committee's action, to which reference was made in the first paragraph. After the condensed report was made in December the author continued his study for the purpose of improving the statement of the theory of school support, of perfecting the methods of its practical application, of computing the costs to the State of the various alternative plans, and of testing their effect in so far as this was possible. It is not practicable to designate all of the differences between the two volumes. Generally speaking, the Committee's

alterations of the author's recommendations were confined to certain forms of Special Aid. It omitted altogether, for example, aid for purchase of transportation equipment, increased the aid for normal graduates teaching in the rural schools, and enlarged the scope of schools for which such aid should be available. The author has retained such recommendations in this volume in the original form in which he presented them to the Committee. His alterations, on the other hand, have been for the most part confined to the field of General Aid. The formula has been improved and tables prepared to control its operation. This involved a simplification in the method of computing aid for the expenses of transportation and for the amounts granted for high school teachers. Since these and certain other minor changes involve no radical change of principle, the author believes they will receive the approval of the Committee, especially since they make the plans already approved more equitable and more effective in their operation.

The extent to which the recommendations submitted are applicable to other states is dependent upon the extent of similarity of conditions; the theory upon which they are based should govern equally well, yet with differences in emphasis upon particular aspects, in all the states. The point most strongly emphasized in this study is the importance of considering true wealth taxable for schools and demonstrated interest in schools as vital factors in determining the share of state support that a local district should receive. New York is fortunate in having already a good measure of true wealth; certain other States are equally, or almost, as well off. It is to these states that the conclusions of this study can be most closely applied. Other states may learn from them the importance of the early establishment of an adequate and reliable measure of taxable wealth through the establishment of efficient state tax commissions.

The author also wishes to record here his warm appreciation of the assistance that a large number of persons have rendered him in the gathering of facts, in the preparation of material, in the criticizing of measures proposed, and in getting the volume through the press. Without their valuable help, so generously given, this volume would not have been possible. Among them are the Chair-

man and many members of the Committee of Twenty-one, the Acting Commissioner of the State of New York and various members of his staff, many district superintendents and school directors throughout the State of New York, the members of the Field Staff of the Finance Section of the Survey, and his own office staff in Philadelphia. Among these are four persons to whom he feels particularly indebted: Dr. George A. Works, Professor of Rural Education, Cornell University; Dr. LeRoy A. King, Assistant Professor of Educational Administration, University of Pennsylvania; Miss Christine Reilly, Statistical Clerk in the Bureau of Educational Measurements, University of Pennsylvania, and Miss Katherine Diehl, his Secretary.

THE AUTHOR

May 31, 1922.

TABLE OF CONTENTS

LIST OF DIAGRAMS

LIST OF TABLES

FINANCIAL SUPPORT

CHAPTER I

INTRODUCTION

Findings of the Study

FAIRLY complete statement of the findings of the study may be found in summary form in the first parts of Chapters VII and XIV (see pages 101 and 195). These deal with the local and state, or central, aspects of the problem respectively.

Brief Description of the Study

A State survey of schools whether it be rural or urban necessarily includes the review of both the local or district, and central or state, factors involved. This is particularly true of a financial survey, especially if there are wide differences among the various local school districts either in their ability to afford proper support for schools or in their efforts to provide an efficient education for their children.

Accordingly the study may be considered as having two parts following this Introduction and Chapter II upon Social and Economic Conditions. In the first division dealing with local finances the study presents a review of the efficiencies and inefficiencies in those agencies of local administration which deal with finances (Chapter III). The subject of costs is next considered (Chapter IV). Analysis and comparisons are made within the rural school districts themselves as to total expenses, expenses per pupil and percentage distributions and also between the various types of districts within these same respects, including the common school districts, union free school districts, villages under superintendents and cities.

These studies of local administrative machinery and of expenses reveal an unfortunate financial situation in many of the rural school districts of the State which should be remedied at the earliest opportunity. In so far as causes are local in character and financial in origin they are for the most part included in the two chapters upon Valuations (Chapter V) and Tax-Rates (Chapter VI). The treatment of these subjects reveals a number of interesting facts which are of great consequence and which furnish the most important data for the working out of a proposed plan of state support. Before this latter subject is entered upon the findings of all the chapters dealing with the local phases of the situation are brought together with a statement of the bearing of these conclusions upon the various forms of local territorial units for the administration of schools (Chapter VII). There are also attached to this chapter as a sort of addenda two other somewhat related subjects relative to the support of local schools, namely, bonding and the financial administration of a possible intermediate unit.

In the second portion of the study concerning the finances of the central, or state unit, as opposed to those of the local, or district units, there is first presented a chapter dealing with the theory of school support in which is laid down the foundation for the criticism of the present system of central support and also for the revised plan recommended as an improvement thereupon (Chapter VIII). It contains a statement of the principles and the criteria by which both the existing and proposed plans of state support are judged. Chapter IX describes and criticizes the present New York system of general aid and also makes references to similar systems in certain other states, particularly those of New England. Then follows the chapter in which the proposed plan for General Aid is described in full detail (Chapter X). An evaluation of New York's various forms of special aid is included in Chapter XI, together with suggested modifications and extensions thereof.

It did not seem wise to close the study without a practical test of the conclusions reached as regards both the workings of the proposed plan of central support and the operation of the reformed plan of local finance under a new territorial unit. The chapter which follows tells how the Field Staff of the Financial Section of the Survey

made a fictitious reorganization of the schools and of the school districts (Chapter XII) in order that the validity of the conclusions of the study might be established by actual trial under conditions very similar to those which would actually prevail if they were afterward adopted by law. This chapter contains a statement of the standards, relating to the size of territory contributory to a school and to costs of combined and community schools, which were worked out on the basis of conditions both within and without the State as furnished by the preceding chapters and also by other sections of the Survey.

Chapter XIII gives in detail the comparative costs of schools to the tax payers as measured in terms of tax-rates with various combinations of different territorial units and different plans of state aid. This chapter also contains the opinion of the author as to the validity of the claims made for the proposed revised system of state support. Finally, in Chapter XIV the answer is given to the question whether it is practicable for New York to institute the new plan of state aid proposed, together with further comments upon it. It also contains a summary of the findings of the second part of the study.

Districts Included in Study

The study has been confined to rural school districts except in so far as it seemed necessary to make comparisons with cities in order to obtain a true picture of education throughout the State as a whole. These comparisons are made in costs, valuations and in tax-rates, also in the operation of the present system of state aid and in the effect of the proposed revised system of state aid.

Of the 208 district superintendents' districts in the State, 24 were assigned by the Joint Committee on Rural Schools to this section of the Survey. They contain approximately 1100 common school districts out of the 9644 in the State and 81 out of the approximately 645 union free school districts. Thirteen of these supervisory districts are situated in and compose all of the territory in three widely separated counties especially designated for intensive study by the Committee as best representing the State as a whole. In addition to these 24 supervisory districts certain data were obtained from 18 other supervisory districts which were used to check the reliability

of the data obtained from the 24 supervisory districts as typical data for the entire State.

Field Work

The Field Staff was composed of four men, all of whom had previously given special attention to the study of rural school problems and who had had experience with rural schools and were well acquainted with the social life of the country people. They were Doctor Julian E. Butterworth, Professor of Rural School Administration, Cornell University; Doctor LeRoy A. King, Assistant Professor of Educational Administration, University of Pennsylvania; Thomas A. Bock, Assistant Director of the Department of Rural Schools, State Department of Education, Harrisburg; and John D. Brooks, Graduate Student of the University of Pennsylvania, formerly Superintendent of Schools, Sussex County, Delaware, and Superintendent of Schools in several cities and towns of Massachusetts which included rural territory. This staff furnished a very important part of the data upon which the conclusions of the study are based. The staff met with the Director of this section at Cornell University in the early part of June 1921 for the preliminary consideration of plans. After these had been tentatively agreed upon each man went into the field assigned to him for two days of actual work with the plans. Another conference followed at which the plan of operation and the standards to be used were definitely fixed. During the three weeks they spent in their respective counties the Director visited the various fields and coördinated their work, giving such additional instructions as seemed necessary. Each man completed the recording of his data and the computations thereof in the field. During all of this work these men had the cordial assistance of the district superintendents and of many of the citizens of the communities. Every effort was made to obtain a true statement of all the essential points involved.

The field work was confined to the three counties selected as most typical of the entire State. Delaware is a mountainous county, situated in the foot-hills of the Catskills and contiguous to the northeastern corner of Pennsylvania. The population is sparse; property valuations are low; dairying is the dominant industry; and transportation is difficult. In contrast, Monroe County, situated along

the border of Lake Erie, has a rich soil; is thickly settled, having Rochester, the third city of the State, as its county seat; property valuations are high; its industries are varied, and there are excellent roads, numerous railways, and street car lines making communication between its various parts relatively easy. Tompkins County possesses characteristics midway between these two extremes and is, perhaps, as typical of the State of New York as any county that could be found. It is situated near the middle of the State with Ithaca as its principal center of population. The southern part of the county is hilly and its soil is poor. In the northwestern part of the county the topography is relatively level and much of its soil is of good fertility. Its population is near the average and its property valuations are not near either of the extremes; and, while transportation presents considerable difficulties in certain portions of the county, it is quite normal in others.

Materials and Method of Study

The study presents three different aspects from the standpoint of materials and method. First, there is a study of data relating to receipts, payments, valuations, etc., furnished by the State Education office, the State Tax Commission and other state offices. In the treatment of the data the usual standard methods are followed. The chapters dealing with expenses, valuations and tax-rates (Chapters IV, V and VI) fall in this group. Second, there is a study of the data gathered in the field by the Field Staff in which a new adaptation of methods before suggested in previous studies is used. This appears for the most part in the chapters on local school administrative machinery and comparison of expenses, tax-rates, valuations and state aid under different plans (Chapters III and XII). Third, material of a more original character is found in a theory of state support of local schools, in the derivation of a new method based thereon, and in the testing of its practical operation (Chapters VIII–XIV).

Conclusions

The conclusions of the study are found in Chapters VII and XIV which close respectively the treatment of the local and central sections of the report. Briefly, it may be said that this study shows

that there are, on the one hand, very great differences in the ability of school districts to support schools, and, on the other hand, great differences in their conceptions of what a good school is, and, therefore, a lack of effort to have efficient schools. The situation requires a reorganization of schools and also a reorganization of school districts, which support and control these schools, into larger units so arranged as to promote the best interests of the education of every child to the fullest extent of his need. A revised system of state support is also necessary in order to equalize valuations and tax-rates and to develop new conceptions regarding the standards of education in local communities, and at the same time to preserve in them that degree of initiative and independent action which will foster a democratic government. Another aim which should control in the working out of this plan is that it should be so constructed as to respond readily and definitely to those changes which may occur in a local district from time to time either as regards its ability to support schools or its desire for better or poorer schools. A formula and also working tables for the distribution of the amounts of state aid are furnished which, it is believed, satisfy all of these conditions.

CHAPTER II

SOCIAL AND ECONOMIC CONDITIONS

THE total population in the State of New York for the year 1920 as given by the United States Bureau of the Census was 10,385,227, of which 1,795,383 were residing outside of "cities and other incorporated places having 2500 inhabitants or more."[1] The rural school population constitutes about 17.3 percent of the total. While this is small relatively, the proportion of native white population is high, constituting 87.8 percent. The parents of approximately two-thirds were born in the United States. Furthermore, this rural population is greatly decreasing in numbers. In only nine of the counties of the State was there an increase in rural population from 1910–20. The rural population is densest along the Hudson River, the Mohawk Valley and the shores of Lake Erie, while the sparsest population is in the Adirondack region.

Twenty-one percent of the total number of pupils registered, deducting duplicates in the public schools in the year 1919–20, was in the towns, which division of territory corresponds most closely to that which is designated "rural" by the United States Bureau of the Census. The schools in this territory were not, however, as regularly attended as in the cities, since but 19.9 percent of the total aggregate attendance of the State was reported from these districts.

The total expenditures for public schools in the State of New York in 1920 were $108,596,912 of which $22,714,140, or 20 percent of the total, was spent in the towns.[2] The percentage spent for the current expenses in the towns was slightly less, the figures for the State being $93,585,462 and for the towns $18,315,325 or 20 percent.[3]

It will thus be seen from the above figures that this study deals with approximately one-fifth of the total population, one-fifth of the

[1] Fourteenth Census of the United States—Population: New York, 1920 Bulletin, Page 2.

[2] State Department of Education, Albany, N. Y. [3] *Ibid.*

total registration and attendance pupils and one-fifth of the total expenditures and total expenses. It is also significant that the citizens who exercise local control over these schools are mostly of pure American stock and that their number is gradually decreasing.

Topography

The highest altitudes in New York State are in the Adirondacks north of Albany and Utica. The next highest is in the Catskills south of the Mohawk Valley and west of the Hudson. The lowest level, aside from that in the neighborhood of New York City, is along the borders of Lake Erie and the St. Lawrence River, which compose the northwestern boundary of the State. Thus the drainage of the State is for the most part toward the west and north, the rivers running from the Adirondack and Catskill Mountains and the high hills to the west and southwest of the latter, toward the Great Lakes Basin.

Products

During the past ten years there has been a considerable decrease in the number of acres of land used in the raising of corn, oats, peas, beans and similar products, and a corresponding increase in the number of acres devoted to the growing of hay and forage crops. Rural New York is dominantly a dairy country. The economic position of the farmer has not been improving as may be seen from the fact that there has been an increase in the past ten years of from 43.7 percent to 46.9 percent in the percentage of mortgaged farms, and of 50 percent in the amount of mortgaged debt. The average debt per farm has increased 57 percent, while the average value of the farm has increased about 43 percent.[1]

The School District in Rural New York

In this study are included all school districts in the State situated in "towns." A town in New York is the equivalent of a township in the western part of the United States. All the territory in the State of New York, not included in the 104 cities and villages under superintendents, is included in the towns. Two kinds of districts are found in these several towns: the union free school district and

[1] Fourteenth Census of the United States—Agriculture: New York, 1920 Bulletin, page 5.

the common school district. There were in 1917, 10,289 of these two classes of districts in which 16,330 teachers were employed. There are now approximately 645 union free school districts, the great majority of which contain a village and support a high school. The common school districts which are composed almost entirely of farm land, support a one-room, one-teacher elementary school. Since there are about 1000 towns and approximately 10,289 districts situated in these towns, it follows that there are on the average ten districts to a town. However, there is a wide variation for some towns have 40 districts.

These districts are very irregular in size, their boundaries are quite indefinite. Maps giving district boundaries cannot as a rule be found. The assessors and the district trustees know the houses that are included in the various districts, and since the farm belongs to the district in which the farmhouse is situated, it is not necessary to preserve as well defined lines as is required in most of the states of the Union. These districts vary also greatly in size, the average being approximately four square miles to each district. Schoolhouses are smaller than the usual one-teacher district school of the west, and the school grounds are even smaller proportionately than the schoolhouses. In this connection it should be remembered that these grounds frequently were laid out seventy-five or a hundred years ago, and that many of the buildings in the State are fifty or more years old.

The Wealth of the State of New York

New York is one of the wealthiest states in the Union, in proportion to her population. According to the latest report of the Bureau of the Census, the true value of all taxable property was, in 1912, $21,912,000,000, 50 percent more than in the State of Pennsylvania which is second upon the list. Because of her large population, however, she did not have so much per inhabitant as ten of the other states, all of which are situated in the middle or far west where population is more sparse. In proportion to the number of school children, New York is fourth in the list, three western states, Nevada, California and Montana surpassing her. It is thus clearly seen that New York can spend liberally for

the support of schools as compared with the other states in the Union. However, in 1912 she was not doing this. While Idaho in that year spent 50 cents of each one hundred dollars of true taxable wealth, New York spent but 26.4 cents, which was below the average for the United States as a whole and less than 27 states spent for public education.

The reports of the Internal Revenue Commissioner of recent years will bear out this same conclusion. New York pays far larger amounts on account of income and corporation taxes than any other state in the Union.

Income of People of the State of New York

The most recent reliable data regarding the income of persons residing in the United States is that furnished by the National Bureau of Economic Research, New York City, for the year 1919. The tables prepared by Oswald W. Knauth show—(1) that in income per capita of population New York led all of the states with $874.00; (2) that in average income per person gainfully employed she again leads with $2014 as the average amount; (3) that in average income per farmer she stands twenty-first with $1807 as the average; (4) that in the percent of total income going to farmers she stands among the lowest of the states, only 3.45 percent, Rhode Island, Massachusetts, New Jersey, Connecticut and Montana being the only states having smaller amounts.

From these figures two conclusions of value in this study may safely be drawn. First, New York is financially able to make liberal expenditures for public schools. Second, the farmer is not in so good a position financially to grant liberal support to schools as are the inhabitants of urban communities.

Costs of Schools in the State

The absolute costs of schools in the State of New York for the last year for which comparative figures are furnished, 1917–1918, were higher in dollars and cents than those of any other state. The amount spent per pupil attending was exceeded by 11 other states, all of which were situated in the west or middle west with the exception of New Jersey which lies next to New York in rank, as may be seen from Table 1.

TABLE 1.—STATES HAVING IN 1917–18 A HIGHER COST OF EDUCATION PER CAPITA PUPIL ATTENDING THAN NEW YORK [1]

	United States	**$41.45**
1.	Montana	80.54
2.	Arizona	74.81
3.	Nevada	73.37
4.	North Dakota	67.81
5.	California	67.18
6.	Washington	67.18
7.	South Dakota	63.30
8.	Iowa	61.87
9.	Idaho	61.28
10.	Colorado	58.65
11.	New Jersey	58.51
12.	**New York**	**58.12**

[1] Report U. S. Commissioner of Education, Bulletin No. 11, 1920, p. 148.

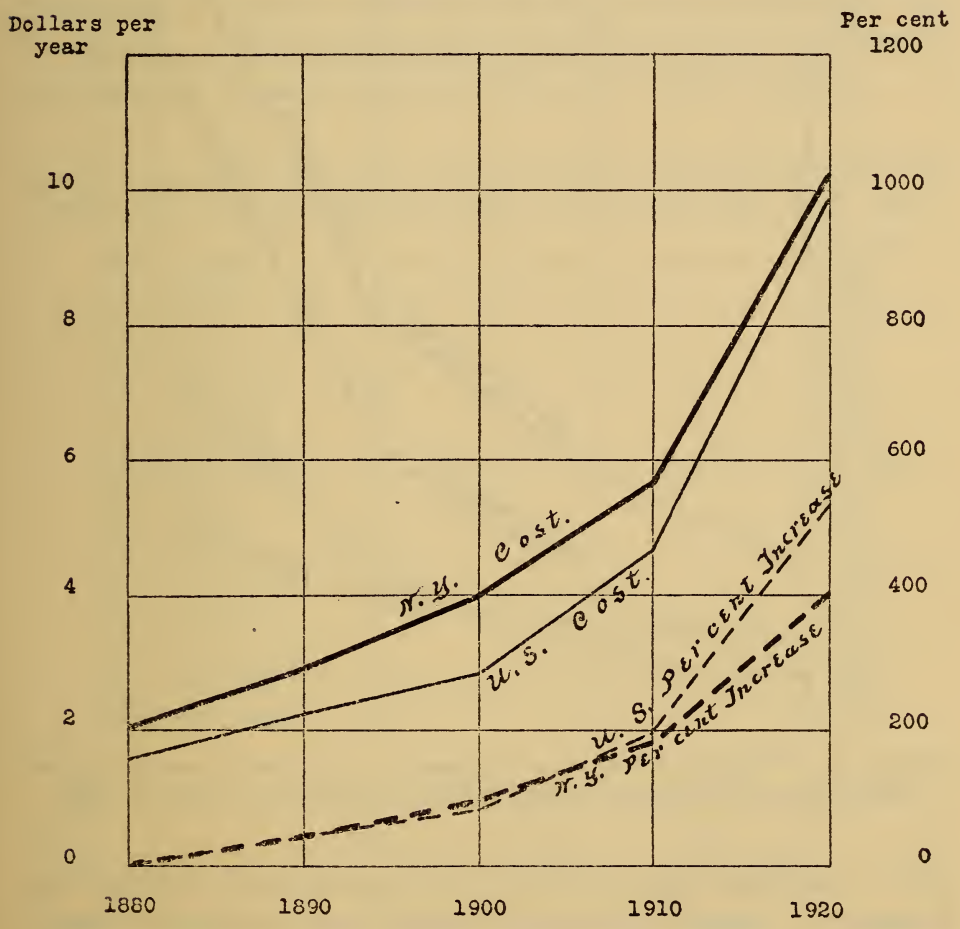

Diagram 1.—Progress of costs of schools per capita in United States and in New York, 1880–1920; and increase in percent of per capita costs based upon costs of 1880

These statements may seem strange to the citizens of New York in the light of the recently increased cost of schools in that State, but what has happened in New York has been happening elsewhere, and strange as it may seem, in increased measure. Diagram 1

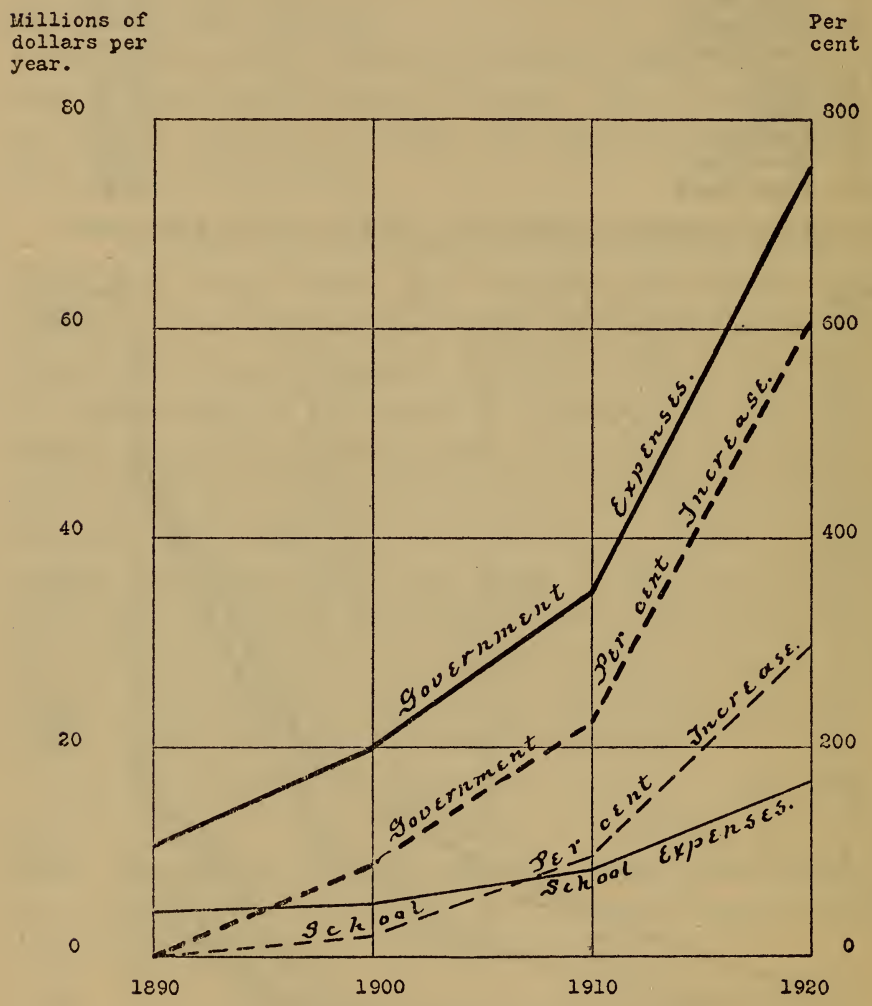

Diagram 2.—Progress of total state expenses for government and for schools 1890–1920, and increase in percent of total cost based upon cost of 1890[1]

shows, according to the reports of the Commissioner of Education, Department of the Interior, that while the cost per inhabitant in New York increased from $2.03 in 1880 to $10.21 in 1920, the

[1] Report of Comptroller of State of New York 1920, pp. 423–431.

average for the United States as a whole went up from $1.56 to $9.89. The increase from 1880 to 1890 was the same in both New York and the United States. Between 1890 and 1900 New York's cost increased more rapidly than in the country as a whole, but since that time costs elsewhere have gone up more rapidly than they have in the State of New York.

It is still more significant in this connection that during the same period New York has not hesitated to increase the total expenses of her State Government as compared with the total state expenses for schools. As is shown in Diagram 2 her expenses for State Government in 1920 were 600 percent of what they were in 1890, while the expenses of schools were not quite 300 percent of what they were in that year. The appropriation of 1920, however, probably put her nearly on the same plane in schools as in other respects.

TABLE 2.—STATES WHICH HAD IN 1918–19 HIGHER REVENUE RECEIPTS PER CAPITA FOR STATE GOVERNMENT FROM ALL SOURCES THAN NEW YORK [1]

1.	Arizona	$15.02
2.	Nevada	14.88
3.	Utah	13.45
4.	Connecticut	12.35
5.	Montana	12.27
6.	Minnesota	11.96
7.	Wyoming	11.24
8.	California	10.40
9.	Massachusetts	10.35
10.	Vermont	10.21
11.	Maine	9.71
12.	New Jersey	9.20
13.	Michigan	8.89
14.	Delaware	8.53
15.	South Dakota	8.22
16.	Washington	8.16
17.	Wisconsin	8.07
18.	**New York**	**8.01**

Her revenue per inhabitant for State purposes as it appears in Table 2 was, in 1919, $8.01, less than in 17 other states. At the same time the amount given by the State per inhabitant for the support of schools was exceeded by 40 other states, as is seen in Table 3.

[1] U. S. Bureau of the Census, Financial Statistics of States, 1919, p. 62.

TABLE 3.—STATES WHICH HAD IN 1918–1919 HIGHER EXPENSES OF STATE GOVERNMENT PER CAPITA FOR SCHOOLS THAN NEW YORK [1]

	United States	$1.74
1.	Arizona	5.46
2.	Utah	5.13
3.	Nevada	4.54
4.	New Jersey	4.04
5.	Minnesota	3.62
6.	Wyoming	3.55
7.	California	3.49
8.	Michigan	3.42
9.	Montana	3.19
10.	North Dakota	3.19
11.	Washington	3.00
12.	Maine	2.98
13.	Texas	2.86
14.	Wisconsin	2.85
15.	New Mexico	2.77
16.	South Dakota	2.77
17.	Delaware	2.63
18.	Idaho	2.29
19.	Vermont	2.25
20.	Kentucky	1.93
21.	Nebraska	1.91
22.	Indiana	1.89
23.	Colorado	1.75
24.	Virginia	1.72
25.	Maryland	1.68
26.	Oregon	1.67
27.	Kansas	1.63
28.	New Hampshire	1.41
29.	Mississippi	1.40
30.	Connecticut	1.37
31.	Alabama	1.36
32.	Missouri	1.34
33.	Georgia	1.30
34.	Iowa	1.29
35.	Pennsylvania	1.25
36.	West Virginia	1.19
37.	Oklahoma	1.17
38.	Arkansas	1.14
39.	Ohio	1.14
40.	Louisiana	1.11
41.	**New York**	**1.11**

In the percentages of expenditures of state government for schools New York was, in 1919, in a very low position being 44th out of 49 states as is shown in Table 4. In respect to highways, however, she had a relatively high position, being ninth in the list as

[1] U. S. Bureau of Census, Financial Statistics of States, 1919, p. 87.

TABLE 4.—STATES WHICH HAD IN 1918–19 A HIGHER PERCENTAGE OF EXPENDITURES OF STATE GOVERNMENT FOR SCHOOLS THAN NEW YORK [1]

		Percent
	United States	33.8
1.	Utah	57.5
2.	North Dakota	54.2
3.	Texas	53.2
4.	New Mexico	51.0
5.	Mississippi	50.8
6.	New Jersey	49.9
7.	Georgia	49.2
8.	Delaware	48.7
9.	South Dakota	46.2
10.	California	45.0
11.	Alabama	43.7
12.	Arizona	43.6
13.	Nevada	43.5
14.	Nebraska	43.3
15.	Wisconsin	42.6
16.	Michigan	42.3
17.	Washington	42.4
18.	Kansas	42.4
19.	Kentucky	41.7
20.	Virginia	40.5
21.	Indiana	40.0
22.	Wyoming	38.4
23.	Minnesota	38.3
24.	Arkansas	37.9
25.	West Virginia	37.1
26.	Idaho	35.8
27.	Montana	35.2
28.	Maine	34.6
29.	North Carolina	34.3
30.	South Carolina	34.1
31.	Oregon	33.0
32.	Missouri	31.7
33.	Illinois	31.3
34.	Tennessee	31.0
35.	Oklahoma	30.9
36.	Louisiana	29.9
37.	Colorado	29.5
38.	Ohio	28.9
39.	Pennsylvania	26.8
40.	Iowa	26.3
41.	Maryland	25.1
42.	Vermont	22.2
43.	Florida	19.0
44.	**New York**	**18.8**

appears in Table 5. The practice of New York as regards state aid to highways furnishes an example with which any future plans for

[1] Bureau of Census, Financial Statistics of States, 1919, p. 88.

TABLE 5.—STATES WHICH HAD IN 1918–19 A HIGHER PERCENTAGE OF EXPENDITURES FOR HIGHWAYS THAN NEW YORK[1]

		Percent
	United States	11.4
1.	Washington	29.7
2.	Connecticut	22.8
3.	Oklahoma	21.3
4.	Idaho	20.0
5.	Maryland	19.9
6.	New Hampshire	19.6
7.	Colorado	19.6
8.	Vermont	18.5
9.	**New York**	**18.2**

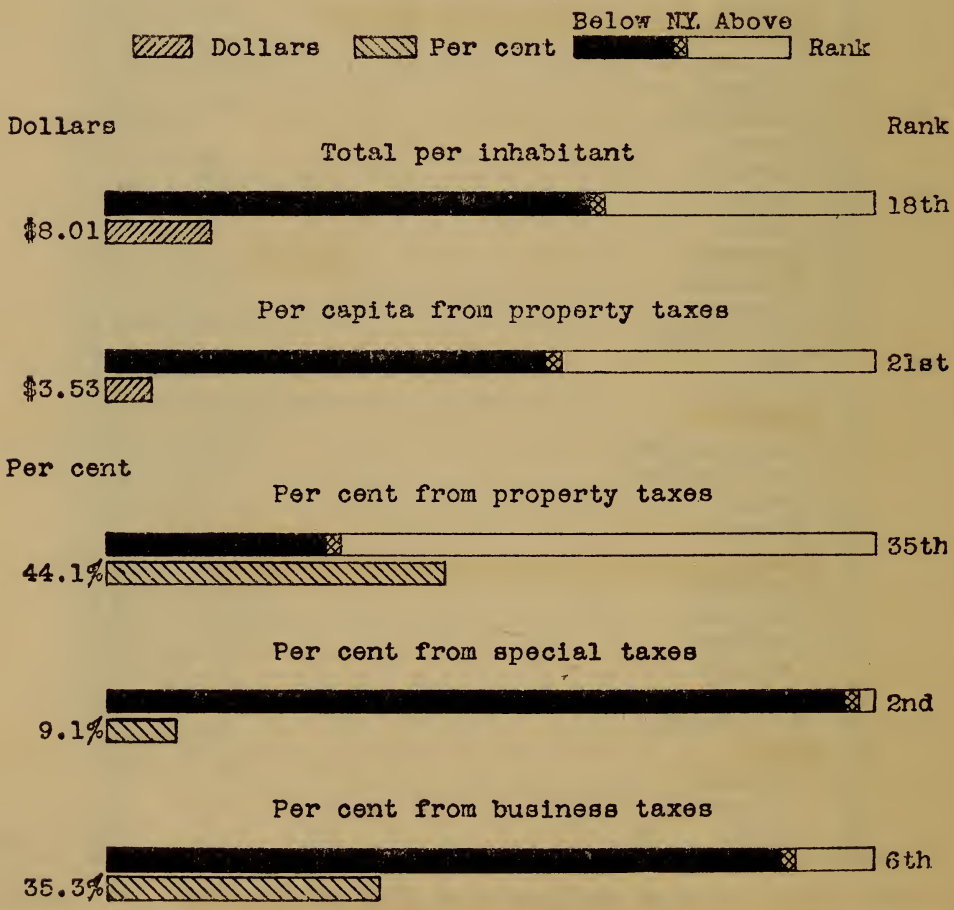

Diagram 3.—New York's rank among the states in revenue receipts for state government, and amounts and percents of such revenue, 1918–1919

[1] U. S. Bureau of Census, Financial Statistics of States, 1919, p. 88.

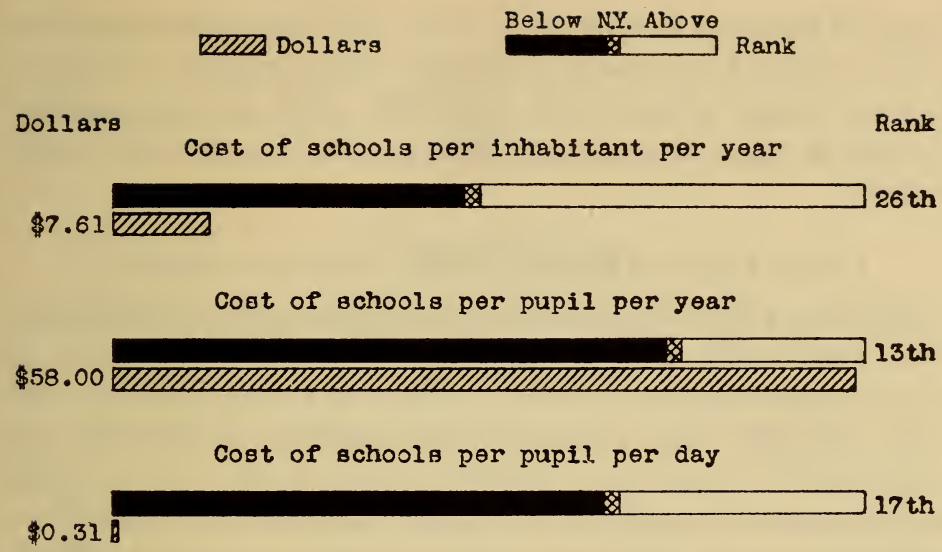

Diagram 4.—New York's rank among the states in cost of public schools and amounts of such cost, 1917–1918

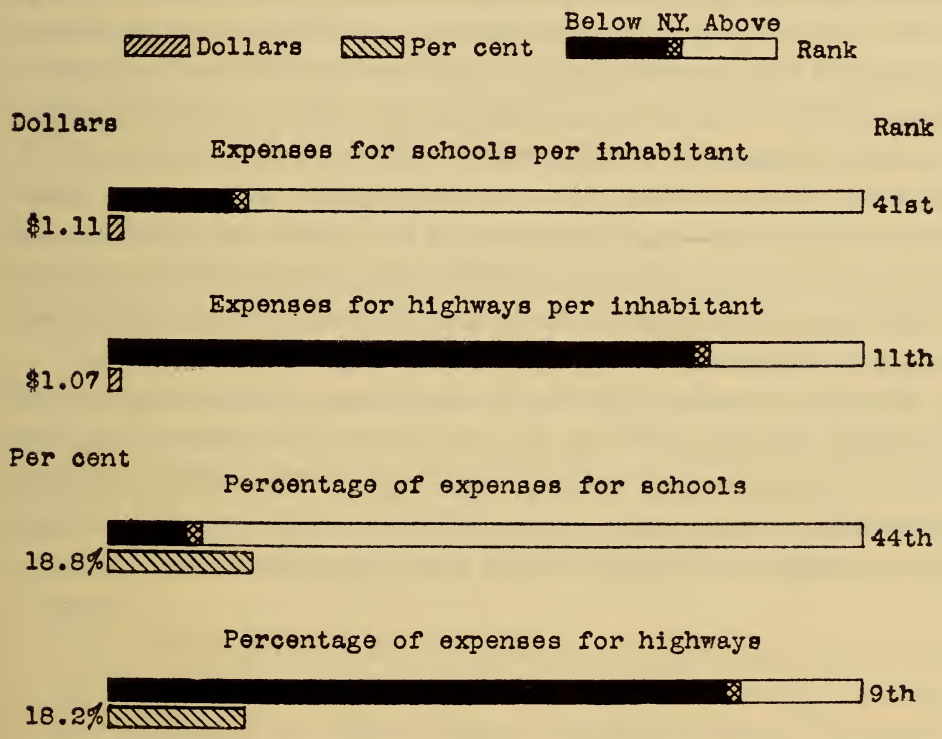

Diagram 5.—New York's rank among the states in state expenses for schools and highways, and amounts and percents of such expenses, 1918–1919

state aid may well be compared. From these two statements there seems to have been good reason for the State increasing its support to the common schools in the year 1920, which fact has probably brought it up to about the tenth or twelfth in rank in the latter respect.

Other Facts in Regard to the Support of Schools

In the year 1918, 90.5 percent of the revenue received from schools was raised locally, and 95.10 percent was received by taxation of the local and state governments. The local tax was levied for the most part upon real estate and upon franchises of railroads and public service corporations. Taxes upon the latter two were paid only to those school districts in which the property is located.

The mill and a half state tax for schools as levied in 1920 is charged to the various counties by the State Tax Commission in accordance with the equalized valuations which it has determined upon after its agents have studied, in the various towns, the relations between the assessed valuations and the sale valuations of properties that have been sold. The Boards of County Commissioners distribute the tax among the various towns in their respective counties in accordance with such equalized valuations as are determined by them. Thus the state and county each concern themselves with the assessed valuations of their subdivisions only to the extent that it is necessary for their own administrative purposes. Each town is permitted to assess its own property and levy its own tax upon whatever basis of valuation it may desire.

Because of the fact that the recent income tax law passed in 1920 provided that one-half of the revenue raised under it shall be distributed among the various towns in proportion to their assessed valuations, there is now a state-wide movement toward increasing the assessed valuations to nearly their true valuations.

CHAPTER III

LOCAL ADMINISTRATIVE ORGANIZATION AND PROCEDURE

Local School Administrative Machinery—Officers and Duties

THE administrative organs of a common school district are the annual district meeting, the single trustee or board of three trustees (the former in the large majority of cases), the district clerk (rarely found, the trustee performing his duties), the tax collector, the treasurer (whenever the annual meeting votes to have such officer), and the town supervisor.

The annual district meeting elects the officers just named and levies the taxes. The only minimum and maximum limits which are specified in the law are (1) an adequate amount to run the school, paying the teacher at least the minimum salary provided by the State, and (2) a maximum amount of $25 per year for library books, apparatus, etc. The officers are elected for one year, except if there are three trustees, each is elected for three years.

The trustee prepares the tax-roll in accordance with the action of the district meeting and delivers it to the collector. He also has the authority to levy certain taxes required by state law in case the district meeting fails to levy them. He is the custodian of the school property, selects the teacher, prescribes the course of study and the text books, and is the chief administrative agency of the district.

The sole function of the collector is to collect the taxes on the tax-roll except when he also serves as treasurer, in which case he is the custodian of the school funds. He pays out on the order of the trustee or, when there are three trustees, on the order of at least two of them. The treasurer receives the tax money from the

collector and pays it out upon the order of a single trustee, or two trustees as the case may be.

The supervisor of the town is the custodian of the so-called state money, which is composed of the funds distributed by the State Commissioner of Education to the various districts. In case any district directs him to do so after the tax collector or the treasurer has filed a proper bond, he must turn such district's share over to the district officer. In many portions of the State, however, this is seldom done.

Procedure of Raising, Collecting and Caring for School Money

The tax-rolls are prepared annually by a board of town assessors during the summer months. The common school district's trustee copies such portion of the town tax-roll as is applicable to his own district having no authority to alter the same except in certain very unusual specified conditions. The annual meeting occurs in the evening of the first Tuesday in May. At this time the trustee is expected to present a budget showing the amounts that will be needed to run the school during the coming year, beginning with the first day of August. Usually the school meeting votes upon the character of the school and then leaves it to the trustee to determine the amount of tax that will be required upon the property as assessed to furnish the necessary amount of funds. This practice cannot be seriously criticized, however, because of certain conditions. It is not always possible to ascertain the exact amount of taxable property, nor, on the other hand, to determine the amount of money necessary to expend in order to get the kind of teacher desired. It will be observed that practically four months intervene between the time of the annual meeting and the date on which the tax-roll is supposed to be given to the tax collector, August 31. A number of contingencies may occur during this interval.

There are several features in which the financial procedure, other than that just mentioned, would deserve our favorable or unfavorable criticism. First, it is to be noticed that there is a useless multiplicity of officers. Just why it is desirable for a common school district, having an area of from three to six square miles, with an

attendance ranging from 5 to 25 and with a population of from 50 to 150 people to have the school money, not usually amounting to over $1000 per year, distributed among two or three persons, each of whom must file a bond and make the required reports, is not apparent upon the surface, nor has the Survey staff been able to find justification for this practice.

In contrast with this unfavorable practice is another which is to be commended, namely, making use of the county treasurer to collect the taxes of certain corporations. It is believed that if the county treasurer were made the officer to whom all taxes were to be paid at stated times in the year—possibly by dividing payments into two portions, separated by three or four months—not only would time unnecessarily consumed by these various officers in duplicating work be economized, but the cost of schools would also be reduced by reason of the saving of the fees paid to such officers. This consolidation of all machinery of tax collection prevails in certain of the western states, as in the state of Iowa, and has been found to work smoothly. A farmer coming from the State of Iowa to the State of New York would be greatly perplexed by the complicated nature of the system of payment of taxes—not only school taxes, but other taxes as well. The Iowa plan represents a later step in the evolution of tax collecting and the farmers of New York might well consider its adoption in this state.

Under this plan the county treasurer would turn over to the district treasurer the funds properly belonging to the district at certain specified times in the year. It usually happens, in those states in which such a plan prevails, that the farmers pay their taxes at local banks scattered throughout the counties, which banks are depositories for the county funds. When the county treasurer turns these amounts over to the district, they usually remain in the same bank to which the taxes are paid but the district treasurer now has the control over them rather than the county treasurer.

The Machinery in Operation

In connection with its field work the Financial Section of the Survey took occasion to inquire into the management of the annual meeting, of the trustees and of the financial officers in so far as

seemed necessary in order to reach a judgment regarding the efficiency with which they handled financial matters. Blank forms were prepared at the conference of the field workers in Ithaca containing an outline of the points of which inquiry should be made of district superintendents, trustees, merchants and others as they came in contact with these persons in the course of their field work. It became apparent very soon, at least in the territory covered by the field workers, that the practices were unbusinesslike and wasteful in practically all districts although carried on honestly and oftentimes at considerable personal sacrifice. Because of this apparently universal condition it was concluded that further personal inquiry was superfluous and that just as reliable information could be gathered more easily through a questionnaire and from a territory much greater than could possibly be covered by the field workers. The experience of these men in their field work made it possible, however, to direct the questions toward those factors which were of the most importance in the financial administration of rural schools.

Two questionnaires were prepared, one directed to the 208 district superintendents of the State and the other to the trustees of common school districts. This latter questionnaire was sent to the district superintendents with the request that they be sent to those trustees who would be most likely to answer the questions. One hundred and twenty-eight replies were received from the district superintendents and 944 from the district trustees. The questions asked, together with the percentage of common school districts for which affirmative replies were given, are as follows:

1. Are crayons, brooms and pails purchased for your school at a local store? According to the district superintendents such practice prevails in 86 percent and according to district trustees in 96 percent of the districts.

2. Are discounts secured from retail prices? According to both the district superintendents and the district trustees such discounts are secured in only four-tenths of one percent of the districts.

3. Are competitive bids secured on fuel? District superintendents said bids are secured in 18 percent and trustees in 43 percent of the districts.

4. Are competitive bids secured on furniture, maps, globes, etc.?

District superintendents said this is done in four percent while the district trustees said it is done in 12 percent of the districts.

In contrast with the practice set forth above may be presented the plan followed by certain Boards of Education during the year in which the town system prevailed in New York. A group of towns located near each other in Erie County made estimates of the amount of supplies of all kinds that would be needed for the coming year and submitted them to various firms. As a result, a saving of from 20 to 40 percent was made over what would have been necessary to pay for this same material had it been bought at the local stores by the respective school systems according to the practice now prevailing. The inevitable conclusion is that purchasing of school supplies in small country stores is an expensive practice. While the country store is a convenient place to make such purchases, a proper supply of the best material needed for the school must so frequently be lacking as to count greatly against the efficiency of the school.

4a. Was the advice of the district superintendent sought during the past year in the selection of educational supplies and equipment? The district superintendents say that this was done in 56 percent of the districts.

This indicates such a lack of professional participation in the purchase of supplies as to indicate clearly considerable waste by reason thereof. It is well known among school administrators throughout the United States that district trustees are frequently imposed upon by agents who have such supplies and equipment to sell. This constitutes one of the most unfortunate species of waste that we have in the public schools of the country today.

5. Did the trustee present a statement or budget to the annual meeting last year giving the amount of money needed for various purposes to run the schools next year? District superintendents said this was done in 52 percent and the trustees in 49 percent of the cases.

5a. Did the trustees seek the advice of the district superintendent in preparing such a statement? District superintendents said this was done in 26 percent of the cases.

6. Did the meeting vote a lump sum to run the schools next year?

The superintendents said this was done in 40 percent of the districts, trustees in 41 percent of the districts.

7. Did the meeting vote a definite amount for definite purposes? Superintendents said this was done in 23 percent and the district trustees in 72 percent of the districts.

8. Did the meeting direct the trustee to decide the amount to be raised by tax? The district superintendents said this was done in 33 percent and the trustees in 61 percent of the districts.

From the replies to the last five questions it would seem that the crudest sort of planning was done in regard to the expenditures for the coming year and that in but one-half of the cases was any assistance rendered by a professional school officer. Full efficiency would require that a careful estimate be made of all items of expense. If these estimates are not prepared by a professional officer, they should in all cases be submitted to him for his suggestion. The practice in city school districts is to have the city superintendent prepare a detailed statement of the expenses of every school in his system, bringing this statement together into one large budget for the entire system.

From the replies of the district trustees it would seem that only about 20 percent of the district meetings voted definite amounts for definite purposes, while approximately 40 percent voted a lump sum and the remaining 40 percent left it to the trustees to determine an amount to be raised by tax. Thus it is that approximately 40 percent of the district meetings were virtually ciphers in so far as tax matters were concerned. In fact, the trustees might have acted without the participation of the town meeting.

9. Does the collector or the treasurer keep a separate bank account for school funds? District superintendents said this was done in 67 percent and the trustees in 75 percent of the cases.

This reveals a most unbusinesslike practice carried on by at least 25 percent of the treasurers of the school districts of the State. A number of incidents were encountered in the course of the field work in which the treasurer not only kept district money mixed with his own, but also kept it at home. In one case at the end of each year a treasurer who mixed school money and personal money indiscriminately would come with his wife, who had an unusual memory,

to the district superintendent, tell him the transactions and have him make out the report for him. While this is an extreme instance, it well illustrates loose practices which are not uncommon.

10. What percent of the school taxes are usually paid on or before October first? Taxes are due upon September first and a five per-cent penalty which may go into the pocket of the tax collector is to be paid after October first. According to replies from district trustees, in 52 percent of the districts not over 25 percent is paid in, in 15 percent of the districts not over 50 percent is paid in, in 16 per-cent of the districts not over 75 percent is paid in, while practically all of the taxes are paid before October first in perhaps but 10 per-cent of the districts.

The loss is considerable during one year to the common school districts of the State of New York, because of this failure to collect taxes promptly and place the money on interest in the local banks. This practice as well as some of the other conditions that have been revealed is to be explained by the fact that the schools are carried on as a big family affair would be managed. In some districts it is the practice not to collect money until it is needed to pay the teacher. If a man desires to be accommodated, he is permitted to put off paying his taxes until he has funds in hand. In a small community such adjustments can be made without financial loss, but not without loss of considerable time to all concerned. When, however, they lead to such practices as are revealed in the next two questions it would seem as though a reform were desirable.

11. Does the collector exact the five percent tax fee after October first? District superintendents said that this is done in 61 percent and district trustees said in 81 percent of the cases. While these percentages seem too large from the impressions that the members of the Survey Staff gained in the field, nevertheless it seems very unfortunate that any such large penalty as this should go to the benefit of the tax collector rather than to the benefit of the schools. It would be much better for the State of New York to fix a salary for its fiscal officers and to have the benefit of all penalties accrue to the schools rather than to the officers.

12. Were payments of salary and bills postponed last year on account of uncollected taxes? The district superintendents said

this was the case in 53 percent of the districts, while the trustees report this to be the case in only 5 percent.

The members of the Survey Staff believe that a figure midway between these two percentages would be more nearly correct. Examples were found where teachers were obliged to wait several months for their salaries because of the failure of the collector to collect taxes. This is very unbusinesslike and unworthy of any government office, particularly those connected with the schools.

13. Is the collector required to give bond? District superintendents said that this is required in 81 percent of the cases while the district trustees said it was done in 87 percent of the cases.

This failure to require a bond of the treasurer in one-eighth of the school districts in the State, practically 1000 districts, is a practice that should not be continued. It is not in accordance with the policy of good government to permit any officer having possession of public funds to go unbonded.

14. Does the district receive interest from the bank upon the weekly or monthly balances on the district's account? Replies from the district trustees indicate that this is true in about five percent of the school districts.

Replies to two other questions indicated that it was necessary to borrow money in 18 percent of the districts and that it was the practice in two-thirds of the districts to borrow money at the bank and in one-third of them to borrow from men living in the community.

Most district trustees are to be commended for the sacrifice they make in order to carry on the business of the schools. Inasmuch as the position is considered an undesirable one, it is not to be wondered that there are many instances of poor business methods. In fact, it would be unreasonable to expect a trustee to exercise in many instances the same careful procedure that would be followed if purchases were larger, or for him to take a considerable amount of his own time to bring to the district savings that in the aggregate are not large.

Many of these faults lie in the fact that the district is so small. Money can be saved through the introduction of better business practices to much greater advantage if a larger unit for the purchase of supplies and for the collection of taxes were adopted.

CHAPTER IV

EXPENSES OF SCHOOLS

THERE are four kinds of fundamental tables upon which the work of this study is based: (1) actual expenditure distributed among various items, (2) cost per pupil for each of these items, (3) percent distribution for the expense items, and (4) receipts, valuations and tax-rates. Data of these four kinds were obtained separately for 1013 common school districts, for 81 union free school or academic districts and for all villages under superintendents and all cities in the State. Tables 57, 58, 59 and 60 giving each of these kinds of data for the common school districts situated in the town of Masonville, Delaware County, are printed in the Appendix in order to show exactly the character of this basal material described.[1]

Analysis of expense of schools may be profitably pursued from two divergent points of view: (1) the expense per unit of organization, such as is represented by a teacher and her pupils, (2) expense per unit of product, such as is represented by the average daily attendance. The former method is peculiarly applicable to the rural schools inasmuch as most of them are one-teacher schools, and are so similarly situated that if they observed the same standards as to the character of school to be maintained they would all cost approximately the same amount irrespective of the amount that the schools produced through the instruction of pupils. This method furnishes a number of interesting points throwing light upon the present rural school situation in this State.

[1] Debt Service and Outlays are not treated in the study. Only approximately one-eighth of the common school districts had any such expenditures and many of the amounts were very small. Others, while large, were for a single year. In other words, there is so much irregularity in these classes of expenditures that a careful study did not seem worth while.

Expenses per Teacher

In Table 6 there is brought together in combined form facts relative to the costs per teacher of all the common school districts

Table 6.—Total Expenses Per Teacher in 1013

Total expenses per teacher	Supervisory districts									
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4
$440–479	..	1	..	..	..	..	..	..	..	..
480–519	..	1	..	..	..	1	..	..	..	..
520–559	..	4	..	..	..	2	..	..	2	..
560–599	1	2	10	2	11	6	..	..	..	..
600–639	5	6	11	11	8	7	..	..	..	..
640–679	11	6	13	16	5	4	..	..	..	..
680–719	8	4	6	7	6	8	..	1	3	..
720–759	7	3	7	4	5	8	..	3	4	..
760–799	6	4	1	5	2	2	2	3	4	3
800–839	4	1	1	2	..	2	1	2	3	4
840–879	2	1	..	..	..	1	2	5	4	6
880–919	1	2	1	2	..	..	2	2	6	4
920–959	1	4	..	..	2	1	9	1	2	6
960–999	2	..	..	..	..	..	4	2	4	4
1000–1039	..	2	..	..	..	..	1	3	6	1
1040–1079	1	..	..	..	1	..	4	1	5	3
1080–1119	..	4	..	..	..	1	1	2	2	5
1120–1159	..	1	..	..	..	..	3	4	3	1
1160–1199	..	..	..	1	..	..	3	1	1	..
1200–1239	..	1	..	..	..	..	..	5	1	1
1240–1279	..	1	..	1	..	1	..	1	..	1
1280–1319	..	..	..	..	..	..	1	..	1	1
1320–1359	..	..	..	..	..	..	1	..	1	2
1360–1399	..	..	..	..	..	..	1	..	..	..
1400–1439	1	..	..	..	..	..	..	1	..	1
1440–1479	1	1	..	..	..	..	2	..	2	..
1480–1519	..	..	..	..	..	..	..	..	1	1
1520–1559	..	..	..	..	..	..	..	..	..	..
1560–1599	..	..	..	..	..	..	..	..	..	..
1600–1639	..	..	..	..	..	..	..	..	..	..
1640–1679	..	..	..	..	..	..	..	..	..	..
1680–1719	..	..	..	..	..	..	1	..	..	..
1720–1759	..	..	..	..	..	..	..	..	..	..
1760–1799	..	..	..	..	..	..	..	..	..	..
1800 and over	..	..	..	..	..	..	1	..	..	..
Total	51	49	50	51	40	44	39	37	55	44
Rank	8	7	2	3	1	5	23	22	20	21
Median cost	$728.5	$726.6	$652.3	$671.25	$648	$690	$995	$990	$950	$953.33

First quartile = $681.61 Third quartile = $956 Median = $786.20

situated in these 24 selected supervisory districts. This table is to be read as follows: In Supervisory District No. 1 of Delaware County there is one common school district which has a total

COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Supervisory districts														Total
Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	1	..	..	3
..	..	1	..	1	..	..	1	..	2	..	..	..	..	13
..	..	..	..	4	..	..	1	..	..	..	3	..	..	40
2	2	6	..	7	1	3	4	..	1	1	6	..	2	83
3	7	8	..	5	..	6	5	1	1	4	10	..	4	109
6	3	5	2	9	3	8	4	2	3	6	5	..	6	105
2	5	10	2	3	2	4	7	2	2	4	10	..	6	100
6	5	3	3	2	7	3	6	3	1	..	1	..	8	80
4	5	2	6	1	3	..	4	3	4	4	5	..	4	65
3	3	1	6	..	5	1	1	7	3	2	3	..	3	59
4	..	2	3	..	3	..	4	1	3	1	4	1	2	48
..	1	2	6	..	5	1	1	7	2	1	1	1	4	58
1	1	3	4	..	1	..	..	1	3	..	..	1	..	31
1	1	2	2	..	3	..	2	..	6	..	1	..	..	31
..	..	1	1	..	..	1	..	3	3	..	..	1	..	25
..	..	..	..	..	4	1	1	1	4	1	1	3	..	31
1	1	3	..	..	..	2	1	..	1	..	..	1	..	22
..	..	1	1	..	..	..	1	..	1	1	2	3	..	16
..	..	..	1	..	2	..	1	..	1	..	1	3	..	17
..	1	..	1	..	..	2	..	1	..	1	1	4	..	16
..	..	..	2	..	..	..	..	..	..	..	..	3	..	8
..	..	..	..	..	..	..	..	1	..	1	1	2	..	9
..	..	1	..	..	..	..	..	..	..	..	..	3	..	5
..	..	..	..	..	..	..	..	..	1	..	..	..	..	4
..	..	..	1	..	..	..	..	..	..	..	..	6	..	13
..	..	..	1	..	1	..	..	..	..	..	..	1	..	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	1	..	..	1	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	2	..	3
..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
..	1	..	..	..	..	..	..	..	..	..	..	5	..	7
33	37	51	43	32	41	32	44	34	42	27	56	42	39	1013
15	14	10	18	4	17	6	12	16	19	11	9	24	13	
$783.33	$772	$742	$913.33	$672	$876	$715	$760	$874.28	$940	$745	$732	$132	$767.5	

expense per teacher lying somewhere between $560–$599, five common school districts having a total expense lying between $600–$639, etc. The right hand column sums up the data for the entire 24 supervisory districts. It shows there was one district which spent as low an amount as that falling between $440–$479, while, on the other hand, there were seven districts which in 1920 spent over $1800 per teacher, practically four times as much. This points out the difference between the costs in certain districts of Suffolk County and certain districts of Delaware County, which counties may fairly represent for the time being the two extremes of money spent for the schools. A further examination of this last column will show that the largest number of districts spent between $640–$679, while almost as many districts spent between $680–$719, and $720–$759. It is to be noted, however, that there are a great many more districts spending more than $760 than there are districts spending less than $640. The average amount spent would, therefore, be above $759. The median cost per teacher for the 24 districts (the cost of the 507th district when the 1013 are arranged in the order of their amounts) is $786.20, while the middle 50 percent of costs per teacher lies between $681.61 and $956.

There are two striking facts which are apparent from merely a glance at this table: (1) that the total expenses per teacher of one-teacher schools vary greatly within each supervisory district, (2) that irrespective of this variation within the individual supervisory districts, amounting in practically all cases to 200 percent, there are great differences among the supervisory districts taken as wholes as to standards of expense. This is shown by the median costs given at the foot of the table for each of these supervisory districts. Above the medians are indicated the ranks of the various districts in this respect beginning with the lowest. This reveals the fact that the median cost of schools in Delaware No. 5 is not as much as half of the median cost in Suffolk No. 1. Along with Suffolk No. 1, a high ranking supervisory district, are the four districts of Monroe; while with Delaware No. 5 are Delaware No. 2, No. 3, No. 6 and Clinton No. 3; in the middle are found Otsego No. 1, Herkimer No. 1, Wayne No. 2 and Tompkins No. 2.

Thus it is evident that the standards of cost of rural schools in the

various parts of the State of New York vary to a considerable degree. Of this fact few are aware; especially is this true of the farmers who support them. Each community is apt to think that its schools are of as high standard as those in any other rural section of the State. Such data as this presented to farmers should demonstrate to them the important need of raising the standards in those sections of the State where they are so low.

Distribution of Expenses

In Common School Districts.—In the preparation of a budget for any enterprise in which expenses are fairly constant, as well as in judging of the efficiency of the financing of any enterprise, it is well to have as definite standards as possible in regard to the relative proportions that should be devoted to the various items. The data that have been gathered in this study should furnish the very best material for the determination of such standards for the rural schools based upon present practice. With this in mind, the percentages found in the basal percentage table, Table 59 (See Appendix) for the six principal items of expense, have been gathered together into combined distribution tables. The table for teachers' salaries, Table 7, is similar in form to that of Table 6. The column at the left gives the various classes of percentages of expense among which the percentages of the individual districts are distributed. At the bottom of each of these tables are given the median percentages for each of the various districts together with their ranks. The median percentage for the entire 24 districts and the lower and upper quartiles, which mark the limits of the middle 50 percent, are indicated. Tables for the other items of expense are shown in Tables 61, 62, 63, 64 and 65, found in the Appendix. It is obvious that while the median percentage may be taken as a fair index of the norm that governs budgets in rural schools, there must necessarily be expected a much wider degree of variation in rural schools than in the case of union free and city school districts.

In Supervisory Districts.—Not only is there great variation within the districts of the various superintendents, which has just been referred to, but there are great differences among the supervisory districts themselves. Take any one of these districts and it is

Table 7.—Percent of Total Expenses for Teachers' Salaries in 1006 Common School Districts in the 24 Supervisory Districts

Percent of total expenses	Supervisory districts																								
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	Total
20–24.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
25–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30–34.99	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1
35–39.99	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	3
40–44.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	2
45–49.99	1	..	..	..	..	..	..	1	..	1	..	1	1	..	..	..	1	..	..	..	..	..	2	..	8
50–54.99	..	1	..	1	..	..	..	5	1	2	..	..	1	1	..	..	..	..	..	1	1	..	2	..	16
55–59.99	..	4	..	..	..	..	1	7	2	3	..	..	2	..	..	..	..	..	1	3	1	..	5	..	29
60–64.99	..	2	..	..	..	..	6	3	4	2	..	1	7	3	..	3	1	..	2	10	1	4	4	1	54
65–69.99	2	2	..	..	1	1	3	3	5	6	1	1	2	2	2	6	2	5	4	13	..	3	7	1	72
70–74.99	2	1	..	4	..	..	8	5	6	5	3	1	6	..	..	6	2	4	4	2	1	5	11	3	79
75–79.99	3	5	2	..	2	3	12	10	12	9	9	3	4	9	6	10	1	4	11	..	1	9	7	7	139
80–84.99	7	10	5	5	3	5	9	3	12	15	6	12	8	12	10	12	6	15	5	3	7	15	1	17	203
85–89.99	18	14	18	26	11	20	1	..	7	..	12	12	16	16	13	2	14	15	4	6	7	15	..	9	256
90–94.99	16	7	24	16	23	15	..	..	2	..	2	4	1	2	1	..	8	3	1	3	6	3	..	1	138
95–99.99	1	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	5
Total	51	47	50	52	40	44	40	37	51	43	34	36	48	46	32	39	35	46	33	41	26	55	41	39	1006
Rank	21	17	23	12	24	22	4	3	8	5	13	16	9	14	18	7	20	15	6	1	19	11	2	10	..
Median percent	87.6	84.5	90	83	90.6	88	75.8	69.1	78.1	76.4	83	84	80.6	83	85	77.2	86.6	83	77	67.5	85.7	81.8	68.9	80.6	82.43

First quartile = 74.14 Third quartile = 87.88

found to be high in certain respects and low in others. The question arises then whether or not there is any tendency for a high rank in one respect to go with a high rank in another respect. Of particular interest is the question whether high total costs of schools are accompanied by high costs in any one or more items. In making this comparison it has been assumed that the median is the best measure of a district as a whole. These ranks, shown in Table 7 and in Tables 61, 62, 63, 64, and 65 given in the Appendix, are brought together for study in Table 8, the order for the arrangement

TABLE 8.—TWENTY-FOUR SUPERVISORY DISTRICTS RANKED ON THE BASIS OF MEDIAN TOTAL EXPENSE PER TEACHER AND CORRELATED WITH THE RANKING OF THE DISTRICTS ACCORDING TO MEDIAN PERCENTS IN VARIOUS FINANCIAL ITEMS [1]

Districts ranked according to total expense per teacher	Total expense per teacher	Salaries of teachers per-cent	Other expenses of instruction percent	Wages of janitors percent	Cost of fuel percent	Cost of maintenance percent	Auxiliary agencies percent
Delaware No. 5....	1	24	7	4	2	5	1
Delaware No. 3....	2	23	8	2	7	3	2
Delaware No. 4....	3	12	17	1	5	1	13
Clinton No. 3.....	4	18	4	14	13	21	19
Delaware No. 6....	5	22	11	3	6	4	4
Greene No. 1.....	6	20	13	16	1	12	16
Delaware No. 2....	7	17	5	17	14	10	12
Delaware No. 1....	8	21	10	5	3	9	7
St. Lawrence No. 1.	9	11	2	9	12	8	23
Tompkins No. 3....	10	9	14	11	10	18	9
Otsego No. 1.....	11	19	1	13	9	6	17
Herkimer No. 1....	12	15	6	10	18	7	10
Wayne No. 2	13	10	18	21	22	17	8
Tompkins No. 2....	14	16	12	12	15	15	5
Tompkins No. 1....	15	13	19	15	11	14	6
Ontario No. 1.....	16	6	20	18	24	13	14
Erie No. 1	17	7	24	19	19	20	15
Chautauqua No. 1..	18	14	22	7	8	11	20
Oswego No. 2.....	19	1	3	8	4	24	3
Monroe No. 3.....	20	8	9	22	23	2	18
Monroe No. 4.....	21	5	21	20	16	16	24
Monroe No. 2.....	22	3	16	6	21	23	21
Monroe No. 1.....	23	4	15	23	17	22	22
Suffolk No. 1.....	24	2	23	24	20	19	11
		r=−.70	r = .52	r = .63	r = .66	r = .61	r = .54

[1] Spearman's Method of Rank Differences.

being furnished by the ranks in the table of total expense per teacher. This table not only enables one to make comparisons in a rough way by observing the relative ranking, but also furnishes the material from which we can determine the coefficients of correlation, expressing mathematically the varying degrees of closeness of correspondence between any two items of expense in all of the districts taken as a group. The figures at the bottom opposite the letter "r" are the coefficients of correlation between the first column, the total cost per teacher, and each of the succeeding ones as determined by Spearman's Method of Rank Differences with proper transmutation. For those not familiar with this statistical procedure it may be said that all possible correlation values lie between + 1.00 and −1.00 the former indicating a perfect agreement in rank throughout from the lowest to the highest, and the latter, perfect inverse agreement with ranks exactly reversed in one respect from what they are in the other. Zero lies in the middle of the scale and indicates neither a direct nor an indirect correspondence, but a total lack of correspondence of any kind. This table shows an inverse correlation between total annual cost per teacher and the percent of expense for salaries of teachers, which means that in those districts where there is a low total annual cost for teachers, there is a high percentage for salaries of teachers and that where there is a high total cost per teacher there is low percentage for salaries of teachers. In fact, a coefficient of −70 indicates a high inverse correspondence. This means that districts which spend but little give the largest proportions of their small amounts to teachers' salaries and cut down expenditures for other purposes.

This statement is borne out by the coefficients for other items of expense indicated in Table 9 which are all positive, whereas that for teachers' salaries is negative. It would also seem from these coefficients that there is a greater tendency to save in the items of fuel, wages of janitors, cost of maintenance, and for repairs, than for auxiliary agencies, which includes health, supplies and library books, and for other expenses of instruction, which includes educational supplies, books, etc. This conclusion is warranted by the fact that their coefficients of correlation are lower for these items than the others.

TABLE 9.—TWENTY-FOUR SUPERVISORY DISTRICTS RANKED ON THE BASIS OF MEDIAN TOTAL EXPENSE PER TEACHER AND CORRELATED WITH THE RANKING OF THE DISTRICTS ACCORDING TO MEDIANS OF VARIOUS FINANCIAL ITEMS [1]

Districts ranked according to total expense per pupil	Total expense per teacher	Salaries of teachers	Other expenses of instruction	Wages of janitors	Cost of fuel	Cost of maintenance	Auxiliary agencies	Expenses per pupil
Delaware No. 5	1	17	6	5	3	6	2	14
Delaware No. 3	2	22	10	3	5	4	4	20
Delaware No. 4	3	23	16	1	2	1	12	16
Clinton No. 3	4	2	3	4	4	15	9	1
Delaware No. 6	5	20	9	2	6	3	7	17
Greene No. 1	6	9	11	14	1	21	18	5
Delaware No. 2	7	19	8	16	19	11	14	24
Delaware No. 1	8	24	13	6	7	9	16	21
St. Lawrence No. 1	9	15	2	8	23	19	23	15
Tompkins No. 3	10	13	15	13	11	17	17	22
Otsego No. 1	11	21	1	11	16	5	3	19
Herkimer No. 1	12	14	7	10	12	16	10	12
Wayne No. 2	13	6	17	20	14	8	6	3
Tompkins No. 2	14	12	14	12	15	12	5	10
Tompkins No. 1	15	18	22	17	18	10	1	18
Ontario No. 1	16	8	24	15	24	13	19	13
Erie No. 1	17	5	23	19	13	20	15	6
Chautauqua No. 1	18	10	20	7	8	7	20	9
Oswego No. 2	19	16	4	9	9	24	13	23
Monroe No. 3	20	4	5	23	21	2	8	4
Monroe No. 4	21	11	21	18	20	14	24	7
Monroe No. 2	22	7	19	21	22	22	22	11
Monroe No. 1	23	1	12	22	10	18	21	2
Suffolk No. 1	24	3	18	24	17	23	11	8
		$r = -.69$	$r = .45$	$r = .64$	$r = .57$	$r = .51$	$r = .42$	$r = -.28$

[1] Spearman's Method of Rank Differences.

Expenses per Pupil

Another way of studying costs of schools is to compare costs per pupil in attendance. The difference between this method and the

Table 10.—Expenses per Pupil in 1006 Common

Expenses per pupil	Supervisory districts									
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4
$20–24.99	..	1	..	..	..	..	..	..	1	1
25–29.99	1	..	..	..	..	..	..	..	1	1
30–34.99	..	1	..	2	1	2	4	..	2	2
35–39.99	..	2	3	3	4	2	5	3	2	..
40–44.99	2	2	5	4	3	1	5	..	5	1
45–49.99	6	5	3	3	6	2	7	4	6	4
50–54.99	1	2	4	7	..	3	3	3	7	6
55–59.99	2	2	1	4	2	6	5	4	5	5
60–64.99	4	3	4	..	4	4	2	8	7	4
65–69.99	3	3	3	4	4	4	2	2	2	2
70–74.99	5	2	1	1	2	2	2	2	1	2
75–79.99	5	..	4	2	..	4	3	1	..	1
80–84.99	2	2	3	3	..	3	..	2	5	..
85–89.99	2	3	3	2	4	1	..	3	1	2
90–94.99	2	2	3	..	..	3	..	1	3	2
95–99.99	2	2	2	1	3	3	..	1	1	..
100–104.99	1	2	..	..	..	..	..	1	..	..
105–109.99	1	..	2	2	1	2	..	..	..	1
110–114.99	2	2	2	2	..	..	..	..	1	1
115–119.99	..	..	1	1	1	1	..	..	..	2
120–124.99	..	2	2	2	..	..	..	..	..	2
125–129.99	1	2	..	2	..	..	..	..	1	..
130–134.99	2	1	..	..	..	..	1	..	..	..
135–139.99	1	1	..	..	..	..	..	..	..	..
140–144.99	1	..	..	..	..	1	..	1	..	..
145–149.99	1	..	1	1	2	1	..	..	..	..
150–154.99	..	1	1	..	..	..	..	..	..	..
155–159.99	1	..	..	2	2	2	..	1	..	..
160–164.99	..	..	..	2	..	..	..	..	..	..
165–169.99	..	2	1	..	..	..	..	..	..	1
170–174.99	..	1	..	..	..	..	..	..	..	..
175–179.99	..	..	..	..	..	..	..	..	..	..
180–184.99	..	..	..	..	..	..	..	..	..	..
185 and over	3	3	..	3	1	1	..	..	..	..
Total	51	49	49	53	40	48	39	37	51	40
Rank	21	24	20	16	14	17	2	11	4	7
Median cost	$76.5	$82.7	$75.6	$69.3	$65	$70	$48.9	$62.8	$56.5	$60

First quartile $64.8;

cost per school unit as represented by the cost per teacher can be illustrated as follows: If a farmer desires to study the cost of cultivating a field of corn, he might compare his cost this year with costs

School Districts in the 24 Supervisory Districts

Supervisory districts														
Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	Total
..	..	..	..	1	1	..	..	..	..	..	..	1	..	6
..	..	1	2	..	..	..	..	..	..	2	..	..	..	8
..	..	3	2	4	..	..	2	..	..	1	1	2	..	29
1	..	..	3	7	3	3	1	1	..	..	1	3	3	50
1	..	3	1	5	3	4	4	3	..	1	4	5	7	69
1	6	1	3	4	3	5	2	5	2	1	4	2	6	91
4	7	3	4	4	8	2	4	3	1	..	6	4	4	90
2	3	4	5	1	2	6	5	2	3	1	2	3	4	79
..	5	5	3	..	7	2	5	3	1	..	5	7	1	84
4	1	1	6	..	3	1	..	1	4	2	5	..	4	61
5	1	3	1	2	..	3	3	3	8	5	3	3	..	60
3	3	4	..	1	1	1	1	2	2	2	1	1	3	45
3	3	..	1	2	2	1	1	..	3	1	1	..	..	38
1	..	5	1	..	1	..	4	..	2	2	2	1	2	42
..	2	1	1	..	2	1	3	1	1	..	2	1	2	33
..	2	..	..	..	2	1	3	1	2	1	2	..	2	31
2	..	1	..	..	..	1	1	6	4	3	3	..	..	25
1	..	2	3	..	..	1	1	..	1	..	1	1	..	20
..	..	2	1	..	..	..	..	..	..	..	2	1	..	16
..	..	1	1	..	..	..	2	1	1	..	2	1	..	15
1	..	..	1	..	..	..	..	..	1	..	2	1	..	14
..	..	2	..	..	..	..	1	1	..	..	..	..	1	11
..	2	..	..	..	..	..	..	1	1	2	..	..	..	10
2	..	3	..	..	..	1	..	..	..	..	..	..	..	8
..	..	1	..	..	..	..	..	..	1	..	..	1	..	6
1	..	..	1	..	..	..	..	..	1	..	1	..	..	10
..	1	..	..	..	..	..	..	..	1	1	..	1	..	6
..	..	..	..	..	1	..	..	..	..	..	..	1	..	10
..	..	..	..	..	..	..	..	..	..	..	1	..	..	3
..	..	1	..	..	..	..	..	..	..	..	..	..	..	5
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	..	1	1	..	..	..	..	..	1	1	..	..	..	5
..	..	1	1	..	..	..	1	..	..	..	..	..	..	3
..	1	2	1	..	1	..	..	..	1	..	3	2	..	22
33	37	51	43	31	39	34	44	34	42	26	54	42	39	1006
18	10	22	9	1	6	5	12	13	23	19	15	8	3	..
$73.5	$62.5	$76.8	$62.4	$43.5	$58.7	$57	$64	$65	$80	$75	$69	$60.7	$54.3	$49.9

Third quartile $90.3

of previous years. In this estimate he would include his own labor, that of his hired men, the cost of his seed, of repairs to his machinery, etc. Suppose that he found his cost per acre compared very favorably with the cost of his neighbors, should he then be satisfied with his study? It is readily seen that from a good business standpoint it is more important to find how the cost per bushel of corn that came off his field compared with the costs of his neighbors' for each bushel off their fields, because his success in making money by farming depends more on the cost of each unit of product raised than upon each unit cultivated. So it is in every occupation, the cost per unit of product is far more significant than the cost of the unit of space or department utilized.

The nearest approach to a unit of product of the school which is practicable for our present purpose is the average daily attendance for the year. It gives us the cost of educating one pupil every day throughout the entire year or, briefly, the cost of one year's schooling for one pupil. Some time we may be able to express our product in terms of units of arithmetic, reading, character, etc., developed during a year, but at present this is impossible.

In Common School Districts.—The costs per pupil furnished on the basal tables similar to Table 58 (see Appendix) were brought together in combined distribution tables for each and all of the 24 supervisory districts, one table for the total amount expended per pupil, which is given herewith, Table 10, and one for each of the more important items of expense. These Tables, 66, 67, 68, 69, 70, and 71 printed in the Appendix show even greater variation within the supervisory districts than was found to be true of the percentage tables given above. It costs one district of Supervisory District No. 1, Delaware County, 12 times as much as another to educate one pupil one year; in Tompkins Supervisory District No. 2 it cost one district ten times as much as another. In other supervisory districts, on the other hand, such as Monroe Supervisory District No. 1 and Erie Supervisory District No. 1, the variation is much smaller. The cost in the district next to the highest in Monroe No. 1, is slightly more than double that of the lowest district, while in Erie Supervisory District No. 1, with the exception of three districts, the variation is not more than two and one-half times the cost of the low district.

TABLE 11.—AVERAGE DAILY ATTENDANCE IN 987 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Average daily attendance	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0–4.99	5	7	3	8	3	4	..	..	..	1	1	1	3	3	..	1	1	1	..	2	2	3	1	..	50
5–9.99	18	15	25	15	17	11	1	4	4	10	9	11	19	7	3	4	2	15	10	11	10	21	4	8	254
10–14.99	17	19	11	15	7	20	4	16	15	9	16	12	15	13	11	13	4	15	7	22	6	18	2	14	301
15–19.99	7	7	11	8	10	5	10	6	17	13	5	10	9	8	13	12	1	7	11	3	4	9	8	12	206
20–24.99	2	4	..	6	2	3	9	8	9	3	2	1	4	5	4	8	..	3	5	4	2	3	11	4	102
25–29.99	..	1	..	..	1	1	10	3	1	5	..	1	..	4	..	2	..	2	1	..	2	2	6	1	43
30–34.99	..	1	..	..	..	..	4	..	3	2	..	1	..	1	..	1	..	1	..	..	..	..	6	..	20
35–39.99	..	..	..	..	..	..	1	..	2	1	..	..	..	2	1	..	..	..	..	..	..	..	3	..	10
40 and over	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
	49	54	50	52	40	44	39	37	51	44	33	37	50	43	32	41	8	44	34	42	26	56	42	39	987
Median attendance	10.44	11.31	9.4	11	10	11.75	22.5	14.5	16.9	15.76	12.03	12.54	11	14.42	15.76	16.04	11.25	12	15	11.81	10.83	11.11	22.72	14.1	13.14

It is apparent, too, that there are variations in standards of total expense per pupil among the various supervisory districts each taken as a whole. The extreme districts are Clinton No. 3 with an average annual cost per pupil of $43.50, and Delaware No. 2, $82.70. Delaware, as a county, ranks high in its costs per pupil, while Monroe ranks low. The districts of Herkimer No. 1, Ontario No. 1 and St. Lawrence No. 1 lie in the middle of the distribution, while Tompkins County as a whole occupies the position mid-way between the median and the upper end.

Causes for Variations in Costs.—The causes of this wide variation obviously lie in the various combinations of the two variables—total expenses and average daily attendance. The unusual diversity in the former has been shown in connection with the total expenses per teacher, the latter is now to receive attention. The average daily attendance in the various districts in each of the 24 supervisory districts has been brought together and the medians computed. These are shown in Table 11.

In a recent study, Dr. George M. Wiley of the State Department of Education, states that of the 8600 one-teacher rural schools 3611 or 42 percent have an average daily attendance of ten pupils or less and then gives the number of schools of the entire State that have each average daily attendance up to and including ten as shown herewith.

Average daily attendance	Number of schools
1 pupil	15
2 pupils	52
3 "	167
4 "	259
5 "	392
6 "	430
7 "	556
8 "	535
9 "	612
10 "	593

These data are of the utmost importance. They indicate unusual waste and form the basis for many of the recommendations of this section of the Survey made in later chapters, particularly in Chapters VII, X, and XII.

Table 12 for Delaware No. 2 shows the variety in the results ob-

TABLE 12.—RELATIONSHIP OF TOTAL EXPENSE PER TEACHER, COST PER PUPIL AND AVERAGE DAILY ATTENDANCE IN DELAWARE COUNTY, SUPERVISORY DISTRICT NO. 2

District	Total cost per teacher	Cost per pupil	Average daily attendance
Hancock No. 8	$671	$22.70	30
Colchester No. 15	548	34.25	16
Hancock No. 18	1044	37.13	28
Colchester No. 2	936	39.55	23
" No. 19	693	43.31	16
" No. 17	937	44.62	21
" No. 11	453	45.30	10
" No. 23	955	45.47	21
" No. 5	917	45.85	20
Hancock No. 5	839	46.61	18
Colchester No. 12	891	48.16	18
Hancock No. 21	622	51.83	12
" No. 16	1004	51.96	19
Colchester No. 19	566	56.60	10
" No. 26	696	58.00	12
Hancock No. 22	553	61.44	9
Colchester No. 14	703	61.56	11
Hancock No. 3	1088	64.00	17
" No. 24	780	65.00	12
Colchester No. 24	748	68.00	11
" No. 8	615	68.33	9
Hancock No. 15	844	70.33	12
" No. 9	1091	74.39	12
" No. 23	1092	84.00	13
" No. 26	924	84.00	11
Colchester No. 7	599	85.57	7
Hancock No. 17	798	88.66	9
Colchester No. 27	711	88.87	8
" No. 28	743	91.87	8
" No. 1	655	93.57	7
" No. 20	669	95.57	7
Hancock No. 19	1469	97.93	15
" No. 1	1112	101.13	11
Colchester No. 4	725	103.64	7
Hancock No. 14	1224	112.72	11
" No. 11	1262	114.72	5
Colchester No. 18	601	120.20	5
" No. 6	607	121.40	5
" No. 30	629	125.80	5
Hancock No. 7	506	128.50	4
" No. 12	654	130.80	5
Colchester No. 13	549	137.25	4
Hancock No. 10	774	154.80	5
" No. 6	1157	165.28	7
Colchester No. 16	666	166.50	4
" No. 22	520	173.33	3
Hancock No. 25	746	248.66	3
" No. 2	641	641.00	1
" No. 27	762	762.00	1

tained from the combination of these two factors: total cost per teacher and average daily attendance—as well as the wide divergence among districts in the same town as regards the adequacy of the financial administration. The districts are arranged in order of the expense per pupil. It will be noted that the instance of lowest cost per pupil is caused by the combination of low cost per teacher with high average daily attendance. The highest cost per pupil is caused by a combination of median cost per teacher and low average daily attendance, while the case having the highest cost per teacher yields a cost per pupil just within the middle 50 percent by reason of a fairly large daily attendance.

TABLE 13.—CORRELATION COEFFICIENTS: (*a*) TOTAL EXPENSES PER TEACHER AND VARIOUS ITEMS OF EXPENSE PER PUPIL IN AVERAGE DAILY ATTENDANCE, AND (*b*) EXPENSES PER PUPIL IN AVERAGE DAILY ATTENDANCE AND VARIOUS ITEMS OF EXPENSE PER PUPIL IN AVERAGE DAILY ATTENDANCE, IN 24 SUPERVISORY DISTRICTS INCLUDED IN TABLE 12[1]

	Expenses per pupil	Salaries of teachers per pupil	Other expenses of instruction per pupil	Wages of janitors per pupil	Cost of fuel per pupil	Cost of maintenance per pupil	Auxiliary agencies per pupil
Total expenses per teacher.....	−.28	−.69	.45	.64	.57	.51	.42
Expenses per pupil in average daily attendance.....	..	.86	−.19	−.45	−.01	−.18	−.29

The coefficients of correlation given in Table 13 have certain significances in this connection. The ground has been prepared, by what has already been said, for a consideration of certain possible relationships that may exist between the various items of cost based on average daily attendance. It would seem from a study of these coefficients of correlation that the frequent combination of low attendance with low or median cost per teacher has produced a low negative correlation between the total amount spent and the amount expended per pupil. This view is strengthened by the rather high negative correlation between the total annual cost

[1] Spearman's Method of Rank Differences.

and cost of teachers' salaries per pupil. Coördinate with this is the consideration that all of the other correlations are positive in a marked, although not to a high, degree. These positive correlations signify that if a small amount of money is at hand and if there is but a small number of pupils in attendance, expenses for janitors, maintenance, etc., are reduced to a minimum, and as a result the cost of teachers is apt to be out of proportion therewith. When we turn to a consideration of correlations between the total expense per pupil and the cost of teachers' salaries per pupil we find a direct correspondence due to the fact that salaries constitute a large proportion of the total expenses. The inverse correlations for the remaining cost items, some of which are marked, and some of which are relatively low, bear out the conclusion reached in connection with the correlations on the line above, namely, that the small pupil schools which have high total costs per pupil and high costs per pupil for teachers' salaries save money through low costs for salaries of janitors, for libraries, for promotion of health and transportation, and for supplies used in instruction.

A correlation coefficient between the average daily attendance and the total expense per teacher has been worked out for the one-teacher common school districts in three supervisory districts, Delaware No. 1, Monroe No. 1 and Tompkins No. 1. The correlation chart shown in Table 14 serves as a graphic representation of the important fact that the low average daily attendance is generally found in the low expense per teacher schools. The coefficient of correlation is +.75 which is higher than would be expected. The importance of this fact will be brought out in Chapter VII.

Expenses in Union Free School Districts.—There are 81 union free school districts, situated within the 24 supervisory districts set apart for special study, for which satisfactory data were obtainable. Costs of conducting schools therein were analyzed in much the same way as those of the common school districts. It has been found that conditions in these union free school districts are similar in so many respects to those in the common school districts that it does not seem important to print the data in such minute detail. However, certain points of difference will be indicated. The following table—Table 15, total amount expended

per pupil—is given as typical of all union free school district tables. It may be observed that there are so few cases within each of the supervisory districts that the medians are not reliable and thus careful comparison between the various supervisory districts

TABLE 14.—RELATIONSHIP BETWEEN AVERAGE DAILY ATTENDANCE AND THE TOTAL EXPENSE PER TEACHER IN THE FIRST SUPERVISORY DISTRICTS OF DELAWARE, MONROE AND TOMPKINS COUNTIES RESPECTIVELY

Total expense per teacher	Average daily attendance							Total
	0–4	5–9	10–14	15–19	20–24	25–29	30–34	
$1450	..	..	..	..	..	..	..	..
1400	..	..	1	1	..	..	..	2
1350	..	..	..	..	1	..	..	1
1300	..	..	..	..	..	..	..	..
1250	..	..	..	..	..	1	..	1
1200	..	..	..	..	..	..	..	..
1150	..	..	..	1	..	1	..	2
1100	..	..	1	..	..	1	1	3
1050	..	..	..	1	..	..	..	1
1000	..	..	1	2	1	..	1	5
950	..	1	1	1	2	2	..	7
900	..	1	3	5	4	..	1	14
850	..	..	2	3	..	..	..	5
800	..	..	4	2	2	..	..	8
750	2	4	9	3	..	..	..	18
700	3	7	4	2	..	..	..	16
650	1	8	5	..	..	..	..	14
600	2	6	2	..	..	..	..	10
550	1	..	..	..	..	..	..	1
500	..	..	..	..	..	..	..	..
Total.....	9	27	33	21	10	5	3	108

Median of total expense per teacher..... $787
Median of average daily attendance..... 12.7
r = + .748

cannot be satisfactorily made. The other distribution tables for cost per pupil as well as those for percentages are very similar in appearance to this one. Our comparisons are, therefore, limited to the union free school districts as a whole. In doing this we shall as-

sume that these 81 union free school districts fairly represent the 645 union free school districts throughout the State, just as it has been assumed that the 1013 common school districts represent fairly the 9644 common school districts.

TABLE 15.—EXPENSES PER PUPIL IN 81 UNION FREE SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Expenses per pupil	Supervisory districts																								
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	Total
$25–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30–34.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
35–39.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1
40–44.99	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	4
45–49.99	1	..	..	..	1	..	1	1	..	..	..	..	1	..	1	..	1	..	..	1	..	..	..	..	8
50–54.99	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	1	..	2	1	8
55–59.99	..	1	..	2	..	..	2	1	..	1	..	..	..	..	..	..	..	..	1	1	1	1	1	1	13
60–64.99	..	..	..	..	1	..	..	..	..	1	..	1	..	..	1	..	..	..	2	..	..	2	3	..	11
65–69.99	..	..	..	1	..	..	..	1	..	..	..	1	..	1	1	1	..	..	..	..	..	1	1	1	9
70–74.99	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	..	6
75–79.99	..	..	1	1	..	..	1	..	..	1	1	1	..	..	..	..	..	..	..	2	..	..	1	..	9
80–84.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	3
85–89.99	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2
90–94.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	2
95–99.99	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	3
100–104.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
105–109.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
110–114.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
115–119.99	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
120 and over	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
Total.....	1	2	2	4	2	2	4	5	1	3	2	3	2	2	5	4	3	3	3	4	3	5	13	3	81

Median expense $62.90

COST OF SCHOOLS IN VILLAGES UNDER SUPERINTENDENTS AND CITIES

This study does not concern itself with costs of schools in cities and references that are made herein to such costs are simply for the purpose of comparing them with the rural schools. The following table—Table 16 showing the total expenses per pupil in first-, second- and third-class cities, and villages under superintendents—is

given as typical of the tables that have been prepared in order to make these comparisons in proper form. Similar distribution tables have been made for each item of expense per pupil and also for percentage distributions for cities.

TABLE 16.—EXPENDITURES PER PUPIL IN FIRST-, SECOND- AND THIRD-CLASS CITIES AND VILLAGES UNDER SUPERINTENDENTS

Expenses per pupil	First-class cities	Second-class cities	Third-class cities	Villages under superintendents	Total
$0– 4.99	..	..	..	..	..
5– 9.99	..	..	..	..	..
10–14.99	..	..	..	..	..
15–19.99	..	..	..	..	..
20–24.99	..	..	..	..	..
25–29.99	..	..	..	..	..
30–34.99	..	..	..	..	..
35–39.99	..	..	1	..	1
40–44.99	..	..	1	..	1
45–49.99	..	..	2	3	5
50–54.99	..	..	13	8	21
55–59.99	..	1	8	6	15
60–64.99	..	1	14	12	27
65–69.99	1	1	1	6	9
70–74.99	1	..	5	5	11
75–79.99	..	2	2	1	5
80–84.99	..	..	2	1	3
85–89.99	..	1	..	..	1
90–94.99	..	..	..	..	..
95–99.99	1	..	..	1	2
100 and over	..	..	..	3	3
Total.....	3	6	49	46	104
Median expense.....	$72.50	$70	$59.68	$62.50	$61.66

COMPARISON OF COSTS IN COMMON SCHOOL DISTRICTS AND IN OTHER CLASSES OF DISTRICTS

Table 17 shows data relative to the amount expended per pupil in the three classes of districts. The figures in the columns give the

TABLE 17.—EXPENSES PER PUPIL IN 1006 COMMON AND 81 UNION FREE SCHOOL DISTRICTS AND 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Expenses per pupil	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$20– 24.99	6	..	..	6
25– 29.99	8	..	..	8
30– 34.99	29	..	..	29
35– 39.99	50	1	1	52
40– 44.99	69	4	1	74
45– 49.99	91	8	5	104
50– 54.99	90	8	21	119
55– 59.99	79	13	15	107
60– 64.99	84	11	27	122
65– 69.99	61	9	9	79
70– 74.99	60	6	11	77
75– 79.99	45	9	5	59
80– 84.99	38	3	3	44
85– 89.99	42	2	1	45
90– 94.99	33	2	..	35
95– 99.99	31	3	2	36
100–104.99	25	..	1	26
105–109.99	20	..	1	21
110–114.99	16	..	..	16
115–119.99	15	1	..	16
120–124.99	14	..	..	14
125–129.99	11	..	..	11
130–134.99	10	..	1	11
135–139.99	8	..	..	8
140–144.99	6	..	..	6
145–149.99	10	..	..	10
150–154.99	6	..	..	6
155–159.99	10	..	..	10
160–164.99	3	..	..	3
165–169.99	5	..	..	5
170–174.99	1	..	..	1
175–179.99	5	..	..	5
180–184.99	3	..	..	3
185 and over	22	1	..	23
Total.....	1006	81	104	1191
Median expense.....	$64.82	$62.95	$61.66	$63.95
First quartile.....	49.9	54.5	54.5	51.03
Third quartile.....	90.3	75.4	69.44	86.4

number of districts that have a cost per pupil lying between the limits of the class intervals in the left hand column. The median costs per pupil are of the greatest significance. They show that the costs per pupil in the common school districts of the State are on the whole higher than those of the union free school districts, and that these in turn are higher than the costs per pupil in cities. Diagram 6 also reveals in a striking manner the fact that there is a large number

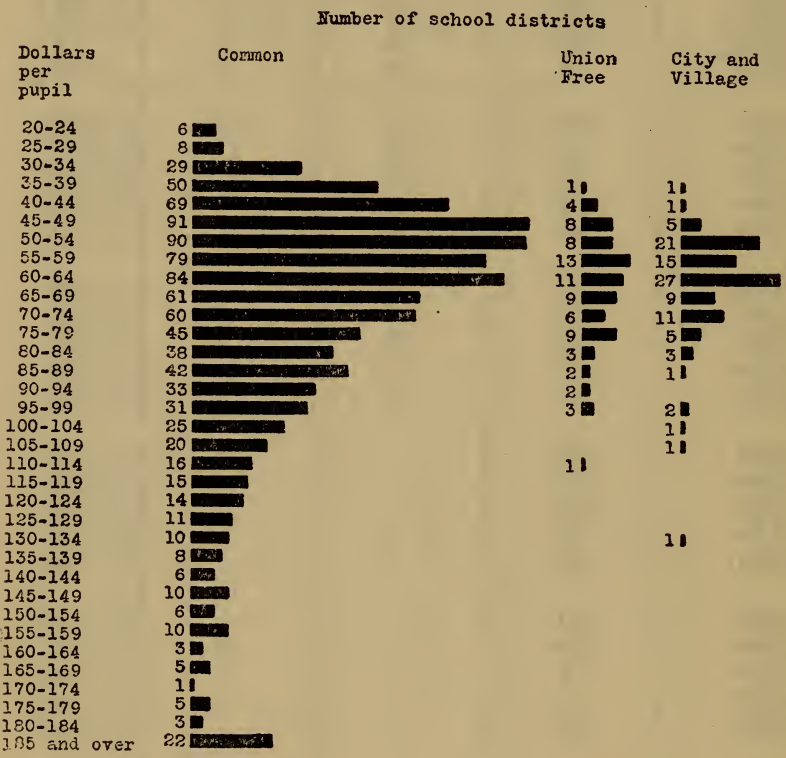

Diagram 6.—Expenses per pupil in 1006 common and 81 union free school districts, and 104 cities and villages, 1919–20, illustrating Table 17

of rural districts which pay more for their educational product than do the most expensive cities. From this it is clear that the most expensive education in New York State is obtained in the rural schools and that these excessive costs are found in at least one-eighth of the common school districts. On the other hand, it is also true that some of the least expensive education is furnished in the common school districts, for in approximately four percent of these districts education costs less than in the city of the lowest rank.

It is surprising that this latter percentage is so low, when the small total expense per teacher is taken into account. More will be said upon this point later on. Tables 72–77 inclusive (printed in the Appendix) give similar comparative distribution tables for various items of expense.

These tables taken as a whole show that, except in the item of teachers' salaries, the lowest costs per pupil are in the common school districts, and the highest costs are in the city districts. They also indicate that the range in the costs of the common school districts is wider than that in the cities. Another striking fact is the limited range in the union free schools.

TABLE 18.—PERCENT OF TOTAL EXPENSES FOR TEACHERS' SALARIES IN 1006 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, AND 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
20–24.99	1	..	..	1
25–29.99	..	..	..	..
30–34.99	1	..	..	1
35–39.99	3	1	..	4
40–44.99	2	..	..	2
45–49.99	8	..	..	8
50–54.99	16	..	3	19
55–59.99	29	1	10	40
60–64.99	54	3	27	84
65–69.99	72	14	18	104
70–74.99	79	29	1	109
75–79.99	139	24	..	163
80–84.99	203	9	..	212
85–89.99	256	..	..	256
90–94.99	138	..	..	138
95–99.99	5	..	..	5
Total	1006	81	59	1146
Median percents.....	82.43	73.7	63.05	80.89

An analysis of the percentage distribution of expenses in these three different classes of districts is presented in detail in six tables. Table 18, for teachers' salaries is presented herewith; the tables

for the other items, identical in form, may be found in the Appendix as Tables 78, 79, 80, 81 and 82. These taken as a whole show a similarity to the cost per pupil tables in that, with the exception of teachers' salaries, the common school districts spend a lower proportion of their school money for each item of expense, while the cities pay the highest proportion.

Furthermore these tables are like those of the cost per pupil tables in that the range of distribution of percentages in the common school districts is, in most cases, much wider than the spread of the distributions of the union free school districts and the villages and cities combined.

Since it was desirable to bring together all of these significant facts, two tables were prepared, Numbers 19 and 20, the first dealing with the cost per pupil and the second with percentage distributions. These tables are constructed alike. They show in the first place the medians of the distributions, and the middle points between the medians and the extreme cases in each of the distributions known respectively as the first quartile point and the third quartile point. The next column shows the difference between these two. The last column gives the coefficient of deviation which enables us to compare all of the items with each other as regards the amount of deviation. This coefficient is obtained by the formula $\frac{Q}{M}$ in which Q signifies one-half of the difference between the upper and lower quartile points, commonly known as 2Q, while M represents the median. The larger the coefficient the more varied is the distribution from the midpoint. These coefficients confirm the observations made above as to range of distribution.

Deductions to be Drawn from these Facts as Presented

The excessive cost of the product of the rural schools as compared with that of the schools in union free school districts, cities and villages is sufficient cause for an inquiry as to the location of the waste and the means of its eradication. Broadly speaking, it may be found either in the way in which the State has divided itself up into local districts for the conduct of the schools, or in the administration of the schools as thus organized.

The first potent fact is that while rural schools cost most per pupil

TABLE 19.—MEDIAN, THIRD QUARTILE, FIRST QUARTILE, MIDDLE FIFTY PERCENT AND COEFFICIENT DEVIATION OF VARIOUS ITEMS OF EXPENSES PER PUPIL FOR VARIOUS CLASSES OF DISTRICTS

	Common school					Union free					Cities and villages				
	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation
Salaries of teachers...	$50.1	$69.74	$39.33	$30.41	.303	$46.73	$52.93	$40.36	$12.57	.134	$39.41	$44.4	$35.58	$8.82	.11
Other expenses of instruction.....	1.49	2.66	.91	1.75	.58	1.61	2.48	1.05	1.43	.44	2.60	3.54	1.75	1.79	.34
Wages of janitor.....	1.56	2.72	.75	1.97	.63	3.31	4.06	2.54	1.52	.22	3.50	4.45	2.97	1.48	.22
Cost of fuel.....	3.48	5.1	2.18	2.92	.41	4.21	5.86	2.58	3.28	.38	3.33	4.37	2.38	1.99	.39
Cost of maintenance..	.85	2.97	..	2.97	1.7	1.67	3.27	.86	2.41	.72	1.98	2.80	1.47	1.33	.33
Auxiliary agencies....	.84	1.46	.45	1.01	.601	.92	1.72	.51	1.17	.63	1.59	2.11	1.14	.97	.305
Expenses per pupil...	64.82	90.37	49.9	40.47	.31	62.95	75.41	54.53	20.88	.16	61.66	69.44	54.5	15.16	.12
Total expenses per teacher.....	$786.2	$956.00	$681.61	$274.39	.17	$121.77	$13.48	$11.05	$243.00	.09	$15.40	$17.18	$14.02	$3.16	.102

TABLE 20.—MEDIAN, THIRD AND FIRST QUARTILES, MIDDLE FIFTY PERCENT AND COEFFICIENT DEVIATION OF VARIOUS ITEMS IN THE PERCENTAGE DISTRIBUTIONS OF EXPENSES FOR VARIOUS CLASSES OF DISTRICTS

	Common school					Union free					Cities				
	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation	Median	Third quartile	First quartile	Middle fifty percent	Coefficient deviation
Salaries of teachers percent.....	82.43	87.44	74.14	13.30	.08	73.7	77.65	70.21	7.44	.05	63.05	66.18	60.32	5.86	.04
Other expenses of instruction percent...	1.28	2.47	.42	2.05	.8	2.64	3.9	1.73	2.17	.41	4.37	5.8	2.97	2.83	.32
Wages of janitors percent.....	2.38	3.97	1.13	2.84	.59	5.25	6.37	4.21	2.16	.2	6.02	6.8	5.1	1.7	.14
Cost of fuel percent...	5.19	6.84	3.52	3.32	.31	6.45	8.25	4.15	4.10	.31	5.41	6.65	3.97	2.68	.24
Cost of maintenance percent.....	1.24	4.44	..	4.44	1.79	2.85	5.25	1.52	3.73	.65	3.53	4.65	2.63	2.02	.28
Auxiliary agencies percent.....	1.29	2.41	.5	1.91	.74	1.64	2.87	.0098	2.86	.87	2.79	3.85	2.12	1.73	.31

they cost least per teacher. The median cost in the common school districts included in this study is $64.82, in the city and villages, $61.66. The average cost in the city schools of the State is $70.14. On the other hand the median cost per teacher in common school districts is $786.20 and in city school districts $1540. The average cost per teacher in the common school districts is $982.73, and in city school districts, $1375.96. The differences in enrolment per teacher in these two classes of districts are sufficient in themselves, as was shown in the earlier part of this chapter, to give these striking contrasts. But this description does not reveal all of the significant facts. In the vast majority of cases the lower the salary paid, the poorer the instruction received by the pupils. There is thus a great difference in the quality of the product as well as the quantity of the product. In other words, the rural school pays the most and gets the least in quantity and the poorest in quality for the money that it spends.

But these figures reveal additional facts. Teachers' salaries, although small, consume a larger proportion of the annual budget in rural school districts than in cities. This means that the proportion of the total costs going for needed equipment and supplies is smaller in the rural districts than in the city schools, which fact is confirmed by the percentage tables above. Thus the rural school pupil has not only a poorer teacher from whom to learn, but poor tools and poor supplies and equipment with which to work. The rural schools also spend less for the maintenance of buildings, and for such auxiliary agencies as libraries and promotion of health. In other words, the rural school plants and their surroundings are the poorest of all the schools of the State. From every point of view they pay the most for what they receive and obtain in return the poorest quality of product.

CHAPTER V

VALUATIONS

THE valuation of the property taxable for school purposes determines the ability of a local district to support its own school or schools. In New York State only real and personal property are taxable for local support of schools, as will be seen from Table 21, giving the assessed valuation of both real and per-

TABLE 21.—THE ASSESSED VALUATION OF REAL ESTATE AND PERSONAL PROPERTY AND THEIR RELATIONSHIP IN A NUMBER OF TYPICAL TOWNS AND COUNTIES

Cities	Assessed value of real estate	Assessed value of personal property	Percent
DELAWARE			
Bovina	$540,681	$45,612	.08
Delhi (including Delhi village)	2,384,992	95,500	.04
Meredith	841,691	54,350	.06
Tompkins	626,860	2,400	.003
Sidney	2,535,228	36,600	.01
Hancock	1,720,437	550	.0003
Masonville	317,585	2,000	.006
Walton	5,060,403	14,350	.002
Andes	833,410	30,346	.03
MONROE			
Brighton	6,823,410	..	..
Penfield	2,461,642	5,600	.002
Irondequoit	7,003,660	..	..
Clarkson	1,682,900	19,500	.01
Rush	2,364,592	10,350	.004
Gates	1,896,355	10,000	.005
Chili	3,135,430	2,500	.0007
Henrietta	2,907,850	76,200	.005
TOMPKINS			
Caroline	883,640	4,500	.005
Enfield	598,443	..	..
Lansing	1,741,775	3,500	.002
Ithaca City	15,217,077	..	..
Danby	753,995	..	..
Dryden (including Dryden and Freeville villages)	2,496,479	250	.001
Groton	2,263,110	27,250	.01
Newfield (Newfield village)	885,855	630	.0007
Carried forward	67,977,500	441,988	

TABLE 21.—THE ASSESSED VALUATION OF REAL ESTATE AND PERSONAL PROPERTY AND THEIR RELATIONSHIP IN A NUMBER OF TYPICAL TOWNS AND COUNTIES—*Continued*

Cities	Assessed value of real estate	Assessed value of personal property	Percent
Brought forward	$67,977,500	$441,988	..
CHAUTAUQUA			
Arkwright	331,650	..	..
Jamestown	24,067,976	183,950	.007
Sheridan	3,181,945	57,750	.01
CLINTON			
Mooers	697,456	5,800	.008
Plattsburg	4,396,718	170,200	..
ERIE			
Lackawanna	18,328,959	250	.03
GREENE			
Ashland	175,211	8,200	.04
Coxsackie	2,071,245	37,800	.01
Halcott	65,090	950	.001
HERKIMER			
Little Falls	7,459,925	236,675	.03
ONTARIO			
Canandaigua	4,944,156	159,150	.03
OSWEGO			
Oswego	13,737,589	863,458	.06
OTSEGO			
Oneonta	5,693,889	138,100	.02
ST. LAWRENCE			
Ogdensburg	5,670,065	114,250	.02
SUFFOLK			
Riverhead	4,816,390	87,700	.01
WAYNE			
Huron	1,121,052	300	.0002
Total	$164,736,816	$2,446,521	.015

sonal property in all of the towns of Delaware, Monroe and Tompkins Counties and from some one town in each of the other supervisory districts, the amount of personal property actually assessed is negligible, namely, .015 percent. Personal property is not assessed unless it is reported by the owner, and it is almost the universal custom for owners not to report it. Hence the burden of taxation for local support of schools falls almost entirely upon real estate. The assessment of property upon which the school tax is based is made by the town assessors. That inequalities in as-

sessment of properties within the same towns commonly exist is evident from the statements made by farmers and citizens generally.

Similar disparity exists among the towns when each is taken as a unit. Certain towns are assessed at very low valuations, while others are assessed at high valuations. This difference has been so forcibly brought to the attention of the people of New York State that they have established a special Tax Commission. Its field force visits each county every other year. Its members confer with county officers and town supervisors and from an examination of recorded deeds and of the assessment rolls obtain the relationship between sale and assessed values. On the basis of what is learned from this data and from conferences regarding them they establish an equalization rate in terms of percent of true valuation. Usually within a two-year period there is a sufficient number of sales to make a fair comparison possible between these two items, especially when information thus gained can be supplemented by county and town officers.

Equalization of Assessed Valuations by the State Tax Commission

The results of the work of this field force and of members of the Tax Commission are published annually in the Report of the State Tax Commission and are used by the state officers in apportioning the state taxes levied by the Legislature among the various counties of the State, for it is not the practice in New York State in the levying of a state tax to direct the local authorities to levy a tax of a certain number of mills, but rather to direct these officers to levy a tax which will bring into the State certain amounts of money. What these amounts of money are is determined by the Tax Commission after the taxes have been equalized through the application of the rates of assessment as determined above. Thus, when the Legislature levies a mill and a half tax it knows the exact amount it will bring in since the total amount of the State's valuation has been determined upon an equalized basis. The amount that each local community will have to raise is in the same proportion of the

total tax as the equalized valuation of its property is of the total equalized valuation of the property of the entire State.

A Unit of Measure of Equalized Valuations

It is obvious that districts not only vary in their equalized valuations but also differ considerably among themselves as to the size of the school which it is necessary for them to support. It is possible for each of two school districts to have a valuation of $200,000, one of which has but one teacher to employ while the other has four. The latter district has, therefore, but one-fourth the ability to support schools that the former has (assuming that all other taxation matters are equal). It becomes necessary, therefore, in such a study as this to reduce all valuations in the State to some common denominator which will eliminate the factor of size of schools maintained by the various districts. The unit chosen for this purpose by the Survey is the number of teachers. This method has two advantages: (1) The salaries of teachers amount to from 60 to 70 percent of the total expense in cities and from 70 to 85 percent in rural districts. (2) There is a close relationship between the number of teachers in a particular school and the number of units or classes that compose it. It is, therefore, the best measure for the size of a school system.

Relationship of Assessed Valuations to Equalized Valuations

The following table, Table 22, will show the relationship between the assessed and the true valuations of property taxable for school purposes in three supervisory districts: Delaware No. 1, Monroe No. 1, and Tompkins No. 1. It shows, for example, that of those districts which were assessed at $40,000, one had a true valuation of $40,000, one of $50,000, two of $60,000, one of $70,000, two of $100,000 and one of $120,000. The coefficient of correlation is unusually high, +.96 according to Pearson. It will be noticed that the median assessed valuation is approximately $50,000 while that of the true valuations is $85,000, which means that the assessed valuations tend on the whole to be near 60 percent of the true valuations.

TABLE 22.—THE RELATIONSHIP BETWEEN THE ASSESSED VALUATION AND TRUE VALUATION PER TEACHER IN THE FIRST SUPERVISORY DISTRICT OF DELAWARE, MONROE AND TOMPKINS COUNTIES RESPECTIVELY

True valuation per teacher	Assessed valuation per teacher																										Total
	$0–10,000	$10,000–	$20,000–	$30,000–	$40,000–	$50,000–	$60,000–	$70,000–	$80,000–	$90,000–	$100,000–	$110,000–	$120,000–	$130,000–	$140,000–	$150,000–	$160,000–	$170,000–	$180,000–	$190,000–	$200,000–	$250,000–	$300,000–	$350,000–	$400,000–	$450,000–	Over $500,000	
Over $400,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	1	2	7
350,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	3
300,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2
250,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	2	..	..	..	..	..	..	6
200,000	..	..	..	..	Median	..	..	..	..	..	..	..	..	..	1	3	1	..	1	..	..	..	..	..	..	..	..	6
190,000	..	..	..	..		..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	2
180,000	..	..	..	..		..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2
170,000	..	..	..	..		..	..	..	..	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
160,000	..	..	..	..		..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
150,000	..	..	..	..		..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
140,000	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
130,000	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
120,000	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
110,000	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
100,000	..	..	..	..	2	1	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
90,000	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	Median		..	..	..	..	..	..	..	..	2
80,000	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
70,000	..	..	..	3	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
60,000	..	..	5	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
50,000	..	..	3	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
40,000	..	6	3	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
30,000	..	9	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
20,000	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
10,000	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
0–	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	3	16	14	13	8	6	7	2	6	1	3	1	1	2	2	4	1	1	2	1	3	4	2	1	1	1	2	108

Median assessed valuation per teacher, $50,000; median true valuation per teacher, $85,000. r = + .96

TABLE 23.—EQUALIZED VALUATIONS PER TEACHER IN 1011 COMMON SCHOOL DISTRICTS IN THE TWENTY-FOUR SUPERVISORY DISTRICTS

Equalized valuations	Supervisory districts												
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Total
$0,000–9,999	..	..	..	..	..	..	..	..	..	..	..	..	0
10,000–19,999	4	5	..	..	..	..	..	..	..	..	..	..	9
20,000–29,999	..	4	2	..	..	2	..	..	..	..	3	..	11
30,000–39,999	8	3	4	5	3	2	..	..	..	..	2	..	27
40,000–49,999	9	3	6	3	3	6	..	..	..	..	2	3	35
50,000–59,999	4	4	7	7	4	4	..	..	..	..	6	2	38
60,000–69,999	6	4	2	1	4	4	..	..	..	..	4	2	27
70,000–79,999	4	3	4	6	3	5	..	..	..	..	3	5	33
80,000–89,999	1	3	..	6	3	4	..	1	..	..	1	5	24
90,000–99,999	1	4	6	4	3	2	..	..	1	..	2	2	25
100,000–109,999	4	2	2	1	3	4	1	1	..	..	2	2	22
110,000–119,999	..	1	2	1	..	1	1	2	3	4	2	2	19
120,000–129,999	2	2	5	3	2	1	..	1	1	2	1	1	21
130,000–139,999	1	2	1	3	2	1	..	1	1	1	..	2	15
140,000–149,999	3	1	..	3	4	1	..	5	1	2	1	1	22
150,000–159,999	1	1	1	4	..	1	..	2	1	..	..	1	12
160,000–169,999	1	1	2	..	..	2	1	3	1	4	..	3	18
170,000–179,999	..	..	1	1	3	1	1	3	3	1	3	..	17
180,000–189,999	1	..	1	1	..	..	1	1	1	1	..	1	8
190,000–199,999	..	3	..	..	..	..	2	..	2	..	..	..	7

200,000–209,999	..	1	..	1	..	..	2	..	2	2	..	..	8
210,000–219,999	..	..	1	1	..	1	3	..	..	..	..	..	6
220,000–229,999	..	..	..	..	..	1	..	1	1	1	..	..	4
230,000–239,999	..	..	..	..	..	..	..	4	4	3	..	..	11
240,000–249,999	..	..	..	..	..	..	2	2	2	3	..	1	10
250,000–259,999	..	..	..	..	1	..	3	..	1	6	1	1	13
260,000–269,999	..	..	2	..	..	1	1	2	1	1	..	..	8
270,000–279,999	..	..	..	..	1	..	..	..	2	1	..	..	4
280,000–289,999	..	..	..	..	..	..	1	1	4	..	..	1	7
290,000–299,999	..	..	..	..	1	..	1	2	2	..	..	..	6
300,000–309,999	..	..	..	..	..	..	..	..	1	2	..	..	3
310,000–319,999	..	..	1	..	..	..	..	..	3	..	..	..	4
320,000–329,999	..	1	..	..	..	..	1	1	1	2	..	..	6
330,000–339,999	..	..	..	..	..	..	2	1	1	..	..	..	4
340,000–349,999	1	1	..	..	..	..	1	..	2	..	..	..	5
350,000–359,999	..	..	..	..	..	..	..	..	..	..	..	..	..
360,000–369,999	..	..	..	..	..	..	3	..	..	2	..	1	6
370,000–379,999	..	..	..	..	..	..	1	..	1	..	..	..	2
380,000–389,999	..	..	..	..	..	..	..	..	1	1	..	..	2
390,000–399,999	..	..	..	..	..	..	..	..	..	1	..	..	1
400,000–499,999	..	..	..	1	..	..	3	2	5	1	..	..	12
500,000–599,999	..	..	..	..	..	..	3	1	2	2	..	..	8
600,000–699,999	..	..	..	..	..	..	2	..	..	..	..	..	2
700,000–799,999	..	..	..	..	..	..	..	..	..	..	..	..	..
800,000–899,999	..	..	..	..	..	..	1	..	..	1	..	..	2
900,000 and over	..	..	..	..	..	..	2	..	..	..	..	1	3
Total	51	49	50	52	40	44	39	37	51	44	33	37	
Median equalized valuation	$60,833	$75,000	$80,000	$86,666	$90,000	$78,000	$295,000	$178,333	$255,000	$243,333	$68,750	$97,500	
Rank	1	6	9	10	12	7	24	20	22	21	3	14	

First quartile $65,117; third quartile $182,031.

TABLE 23.—EQUALIZED VALUATIONS PER TEACHER IN 1011 COMMON SCHOOL DISTRICTS IN THE TWENTY-FOUR SUPERVISORY DISTRICTS—*Continued*

Equalized valuations	Supervisory districts												
	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	Total
$0,000–9,999	1	..	1	..	..	..	..	..	..	..	..	..	2
10,000–19,999	..	..	..	..	..	..	..	..	..	..	..	..	..
20,000–29,999	2	..	..	..	..	..	..	4	2	5	..	..	13
30,000–39,999	6	1	2	..	..	1	..	4	4	5	..	..	23
40,000–49,999	5	4	1	1	4	4	..	4	2	6	..	1	32
50,000–59,999	5	2	1	1	3	7	..	2	3	5	..	1	30
60,000–69,999	4	5	1	1	4	6	1	7	5	3	..	..	37
70,000–79,999	8	7	6	..	2	5	3	6	2	3	..	3	45
80,000–89,999	7	1	2	1	3	4	2	3	1	2	..	1	27
90,000–99,999	3	3	..	..	1	3	..	3	1	3	..	4	21
100,000–109,999	2	..	3	2	3	2	1	4	2	7	..	9	35
110,000–119,999	1	2	2	..	..	2	2	2	1	1	..	6	19
120,000–129,999	2	1	3	2	2	3	1	1	1	4	..	3	23
130,000–139,999	..	..	4	2	2	1	3	..	1	3	1	2	19
140,000–149,999	1	1	..	5	1	2	..	..	..	1	..	5	16
150,000–159,999	1	1	..	5	2	..	1	..	1	..	1	..	12
160,000–169,999	..	2	..	1	1	..	2	..	..	3	1	1	11
170,000–179,999	1	1	4	2	2	..	4	..	..	..	1	..	15
180,000–189,999	..	..	..	1	..	..	2	1	..	..	3	1	8
190,000–199,999	..	..	..	..	..	..	..	..	..	2	1	1	4

200,000–209,999	1	..	1	5	1	..	1	..	..	2	..	..	11
210,000–219,999	..	..	..	..	..	..	1	..	..	..	2	..	3
220,000–229,999	..	2	1	1	1	..	1	..	1	..	..	..	7
230,000–239,999	..	1	..	1	..	..	..	..	..	1	3	1	7
240,000–249,999	..	..	..	2	1	1	1	..	..	..	1	..	6
250,000–259,999	..	..	..	..	..	..	1	..	..	..	2	..	3
260,000–269,999	..	..	..	..	..	..	1	..	..	..	1	..	2
270,000–279,999	..	1	..	..	..	..	1	..	..	..	1	..	3
280,000–289,999	..	1	..	..	..	..	..	..	..	..	1	..	2
290,000–299,999	..	..	..	..	..	1	1	..	..	..	1	..	3
300,000–309,999	..	..	..	1	..	..	..	..	..	..	1	..	2
310,000–319,999	..	..	..	..	..	..	..	..	..	..	1	..	1
320,000–329,999	..	..	..	..	..	..	1	..	..	..	1	..	2
330,000–339,999	..	1	..	1	..	..	..	..	1	..	2	..	5
340,000–349,999	..	1	..	..	..	..	1	..	..	..	1	..	3
350,000–359,999	..	..	..	..	1	..	..	..	..	..	..	..	1
360,000–369,999	..	..	..	1	..	..	1	..	..	..	..	..	2
370,000–379,999	..	..	..	..	..	1	..	..	..	..	..	..	1
380,000–389,999	..	..	..	..	..	..	..	..	..	..	..	..	..
390,000–399,999	..	1	..	1	..	..	..	..	..	..	..	..	2
400,000–499,999	..	2	..	1	..	1	1	..	..	..	5	..	10
500,000–599,999	..	..	..	..	..	..	..	..	..	..	2	..	2
600,000–699,999	..	1	..	1	1	..	..	1	..	..	3	..	7
700,000–799,999	..	1	..	..	1	..	..	..	..	1	..	..	3
800,000–899,999	..	..	..	1	..	..	..	..	..	..	1	..	2
900,000 and over	..	..	..	2	..	..	..	..	..	..	..	..	2
Total	50	43	32	42	36	44	34	42	28	57	37	39	1,011
Median equalized valuation	$72,500	$96,666	$106,666	$170,000	$103,333	$78,000	$172,500	$70,000	$66,000	$87,500	$285,000	$118,333	108,157
Rank	5	13	16	18	15	8	19	4	2	11	23	17	..

First quartile $65,117; third quartile $182,031.

Differences Found in Ability of Districts to Support Their Schools

The data relative to assessed valuations obtained from the State Department have been transmitted into true or equalized valuations, as these valuations are known in the State of New York. The process was that of dividing the assessed valuation in each district by the rate of equalization as determined by the State Tax Commission. The equalized valuation as then obtained was divided by the number of teachers in the district in question as furnished by the State office, thus giving the equalized valuation per teacher.

The equalized valuation per teacher gives an accurate measure of the ability of the various school districts in the State to support their schools. In order to bring this material together for study, Table 23 was prepared, showing the equalized valuation per teacher in 1011 common school districts situated in the 24 supervisory districts chosen for special study. The table in itself presents an interesting picture. It shows very wide differences in the ability of the various common school districts situated in each of the 24 supervisory districts to support their schools. Another obvious fact is that there is considerable variation among the different supervisory districts, each taken as a whole, in their ability to support schools. The districts located in Delaware County, for example, cannot provide as good schools for their children as those situated in Monroe County. Suffolk No. 1 is another district in the latter class, while Otsego No. 2 is an example of the former class. The districts of Tompkins County, on the other hand, vary among themselves as shown from their ranking as numbers 3, 5, 14 among the 24 districts arranged in consecutive order. Taking the 1011 districts as a group, it will be noticed that there are two districts reported with a valuation of less than $10,000 per teacher; on the other hand, there are two districts that have valuations of $900,000 and over, with one in Erie No. 1 as high as $2,500,000 per teacher. The median valuation per teacher for the entire 1011 districts is $108,157. The middle 50 percent of these equalized valuations excluding the 25 percent at the lower and upper ends of the distribution lies between $65,117 and $182,031. It is possible that this

median is a little higher than those of common school districts generally inasmuch as Doctor Butterworth in his study of school buildings ascertained that the median equalized valuation of the one-teacher school districts was $92,000, and that of the two-teacher districts, $270,000 per teacher. For the one- and two-teacher districts combined the median was $95,695. It is probable that the actual median for true valuation per teacher of common school districts lies near $100,000.

The Reasons for These Differences in the Ability of Districts to Support Schools

Obviously, the differences in the amount and quality of land within a school district are factors. There are numerous examples of two neighboring districts each having about the same quality of soil, but one having considerably more land or more town property to be taxed than the other. Delaware County and the lower portion of Tompkins County furnish many examples of the close proximity of a district located on the hills where the soil is poor and population sparse, and of another district situated in the valley where crops are abundant and population more dense, increasing thereby the value of the land.

Another reason, more potent than either of these two just mentioned in causing extreme divergence, is due to the New York method of taxing railroads, electric railways, telegraph and telephone lines, pipe lines, etc. The real estate owned by these corporations is taxable both for town and school purposes but the benefits of this taxation extend only to the towns or school districts within whose limits these properties are located. The effect of this upon the support of towns is not so bad as the effect upon support of schools for the reason that the tax for civil purposes goes to the benefit of the entire town, while the tax for school purposes extends only to the particular school districts through which they happen to pass. Thus it may be that only two or three out of a total of twelve, fifteen or twenty school districts in the town receive any benefit from this large source of income. The valuations of these districts through which the railways pass are greatly augmented beyond those of

their neighbors, as may be seen by comparing Tables 24 and 25. In the town of Ulysses, in Tompkins County, district No. 16 has a railway, a telegraph and a telephone line passing through it whereas No. 13 has no railway.

TABLE 24.—ASSESSED VALUATIONS OF DISTRICT NO. 16, TOWN OF ULYSSES, TOMPKINS COUNTY

FARM PROPERTIES

Size in acres	Assessed valuation	Size in acres	Assessed valuation
24	$4,800	3	$750
16	1,600	48	1,600
12	1,100	34	1,150
114.50	3,550	6	700
96	1,300	45	1,750
136	4,700	101	4,200
65	1,900	51	2,000
25	750	69	2,350
70	2,500	25	700
100	4,000	61	2,150
73	2,950	80	3,400
94	3,300	3	1,500
69	1,900	7	500
89	700	33	500
98	3,100	118	4,250
15	850	170	6,900
92.50	2,550	52	2,000
2.50	500	31	1,150
91	1,800	39.50	1,300
		Total.....	$82,700

PUBLIC SERVICE CORPORATION—REAL PROPERTY Name	Valuation within district
N. Y. Telephone Co.	$1,250
Lehigh Valley R. R.	28,850
Ulysses Coöperative Telephone Co.	100
Total	$30,200

Summer cottages, $457

Two districts situated in Monroe County offer a similar contrast. In this case, however, the differences are much greater, as

TABLE 25.—ASSESSED VALUATIONS OF DISTRICT NO. 13, TOWN OF ULYSSES, TOMPKINS COUNTY

FARM PROPERTIES

Size in acres	Assessed valuation	Size in acres	Assessed valuation
5.50	$150	49	$2,400
25	850	40	2,050
1	500	66	2,650
22	700	H & L	750
38	750	122	4,500
49	2,050	209	7,900
20	550	60	1,850
56	2,400	59	2,750
.50	100	8	350
75	3,100	4	200
15	1,300	18	550
53	1,950	..	..
		Total.....	$40,350

PUBLIC SERVICE CORPORATION—REAL PROPERTY Name	Valuation within district
New York Telephone Co.....	$400
Ulysses Coöperative Telephone Co.....	200
Waterbury Grange Hall.....	600
Total.....	$1,200

Summer cottages, $291

there are no public service corporations in the lower valuation district. (See Tables 26 and 27.)

ABILITY OF UNION FREE SCHOOL DISTRICTS TO SUPPORT SCHOOLS

The equalized valuations per teacher in union free school districts, situated in these same twenty-four supervisory districts, are shown in Table 28. This table has the same characteristics as those of Table 23 for common school districts. It is somewhat surprising that the true valuations per teacher are no higher in this class of districts than in the former, inasmuch as these districts usually include villages. The fact that the salaries of the teachers in the high

schools, which are usually provided by such districts, are higher than those of elementary teachers, puts these districts at a greater

TABLE 26.—ASSESSED VALUATIONS OF DISTRICT NO. 9, TOWN OF CHILI, MONROE COUNTY

FARM PROPERTIES

Size in acres	Assessed valuation	Size in acres	Assessed valuation	Size in acres	Assessed valuation
4	$1,400	1	$2,800	60	$2,100
7	1,200	4	1,600	23	28,000
106	8,500	4	4,500	15.50	1,700
93.50	8,400	10	1,500	125	10,600
84	5,900	39	1,800	9.75	7,000
172	11,200	60	4,500	.75	2,500
.50	1,200	11.50	700	111	8,300
60	3,000	4	1,000	13	1,300
27.50	3,500	155	10,100	38	4,500
53	6,000	70	3,500	70	9,000
1	2,200	12	300	62	6,500
1	2,000	5	200	42	3,700
1	2,400	64	2,200	38	3,500
2	200	21	1,300	27	2,000
3.50	600	75	3,800	40	3,800
43	8,600	170	6,800	5.50	1,000
1.50	2,400	160	6,400	16	2,000
434	82,500	82	4,000	41	3,000
20	30,800	5	400	9.50	900
24.50	2,500	49	1,600	10.50	600
.50	700	42	1,700	42	3,000
.25	2,000	69	2,400	34	2,500
.25	2,000	66	3,600	12	4,700
				Total....	$368,100

PUBLIC SERVICE CORPORATION—REAL PROPERTY Name	Valuation within district
New York Telephone Co.	$6,200
West Shore	64,300
Niagara, Lockport & Ont. Power Co.	11,120
Western N. Y. & P. R. R.	99,490
Western Union Telegraph Co.	1,110
Rochester Telephone Co.	3,875
Buffalo, Roch. & Pittsburgh R. R.	42,300
Rochester Railway & Light Co.	450
Brookdale Realty Co.	14,900
Total	$243,745

disadvantage in the support of schools than at least one-half of the common school districts. It is true, however, that there are fewer of these union free school districts having the extremely low valuations.

TABLE 27.—ASSESSED VALUATIONS OF DISTRICT NO. 4, TOWN OF CLARKSON, MONROE COUNTY

FARM PROPERTIES

Size in acres	Assessed valuation	Size in acres	Assessed valuation
69	$1,750	118	$3,550
59	1,500	58	1,450
51	1,300	118. 50	5,300
59	2,050	40	1,000
60, 32, 28	4,200	59	2,350
79	4,750	59.50	3,000
59, 50	3,000	119	7,150
119	7,150	59.50	3,550
39, 50	2,750	8	250
54, 50	3,250	119	7,150
64, 50	3,850	59.50	3,850
		Total.....	$74,150

ABILITY OF CITIES TO SUPPORT SCHOOLS

In contrast with the low equalized valuations in common school and union free school districts there are the higher valuations of practically all villages under superintendents and all first-, second-, and third-class cities. Table 83, found in the Appendix, furnishes the data upon this point, while Table 84 (also found in the Appendix) gives a list of the villages and cities together with the number of teachers in each, classified into groups according to their equalized valuations per teacher.

In order to facilitate a comparison between the various classes of districts, the total distributions given in Table 23, 28 and 83, are brought together in Table 29. Assuming that the common school

TABLE 28.—EQUALIZED VALUATIONS PER TEACHER IN 79 UNION FREE SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Equalized valuations per teacher	Supervisory districts																								
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	Total
$30,000–39,999	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
40,000–49,999	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
50,000–59,999	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2
60,000–69,999	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2
70,000–79,999	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	4
80,000–89,999	..	..	1	1	..	..	..	..	..	..	..	1	..	1	1	..	1	1	..	3	..	1	..	1	12
90,000–99,999	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	..	1	3	1	..	9
100,000–109,999	..	..	..	..	1	1	1	..	..	1	..	1	..	..	1	1	1	..	..	..	1	..	1	1	11
110,000–119,999	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	3
120,000–129,999	..	..	..	..	..	..	1	1	..	..	..	1	..	..	2	..	..	..	..	..	..	..	2	..	7
130,000–139,999	1	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	2	1	7
140,000–149,999	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
150,000–159,999	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
160,000–169,999	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2
170,000–179,999	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
180,000–189,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
190,000–199,999	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	3
200,000–209,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
210,000–219,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
220,000–229,999	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
230,000–239,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2
240,000–249,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
250,000–259,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
260,000–269,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
270,000–279,999	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
280,000–289,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
290,000–299,999	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
300,000–309,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
310,000–319,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
320,000–329,999	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
330,000–339,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
340,000–349,999	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
350,000–360,000	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
Total.....	1	2	2	4	2	2	4	5	1	3	2	3	2	2	5	4	3	3	1	4	3	5	13	3	79

Median = $107,727.

TABLE 29.—EQUALIZED VALUATIONS PER TEACHER IN 1011 COMMON SCHOOL AND 79 UNION FREE SCHOOL DISTRICTS AND 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS, ILLUSTRATED BY DIAGRAM 7

Equalized valuations per teacher	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0,000– 9,999	2	..	..	2
10,000– 19,999	9	..	..	9
20,000– 29,999	24	..	..	24
30,000– 39,999	50	1	..	51
40,000– 49,999	67	1	..	68
50,000– 59,999	68	2	..	70
60,000– 69,999	64	2	..	66
70,000– 79,999	78	4	..	82
80,000– 89,999	51	12	..	63
90,000– 99,999	46	9	1	56
100,000–109,999	57	11	3	71
110,000–119,999	38	3	5	46
120,000–129,999	44	7	5	56
130,000–139,999	34	7	5	46
140,000–149,999	38	1	5	44
150,000–159,999	24	2	13	39
160,000–169,999	29	2	4	35
170,000–179,999	32	1	9	42
180,000–189,999	16	1	7	24
190,000–199,999	11	3	2	16
200,000–209,999	19	1	5	25
210,000–219,999	9	..	1	10
220,000–229,999	11	1	5	17
230,000–239,999	18	2	3	23
240,000–249,999	16	1	4	21
250,000–259,999	16	..	4	20
260,000–269,999	10	..	3	13
270,000–279,999	7	1	2	10
280,000–289,999	9	..	1	10
290,000–299,999	9	1	2	12
300,000–309,999	5	..	..	5
310,000–319,999	5	..	..	5
320,000–329,999	8	1	5	14
330,000–339,999	9	..	1	10
340,000–349,999	8	..	1	9
350,000–359,999	1	2	..	3
360,000–369,999	8	..	..	8
370,000–379,999	3	..	..	3
380,000–389,999	2	..	2	4
390,000–399,999	3	..	1	4
400,000–499,999	22	..	2	24
500,000–599,999	10	..	..	10
600,000–699,999	9	..	..	9
700,000–799,999	3	..	1	4
800,000–899,999	4	..	1	5
900,000 and over	5	..	1	6
Total	1,011	79	104	1,194
Median equalized valuation	$108,157	$107,727	$182,857	$117,608

districts and the union free school districts represented in this table are typical of their respective classes of districts throughout the State, it is evident from this assembly of cases that, while the amount of wealth behind each teacher is 75 percent greater in the cities than in the other two classes of districts, nevertheless there are

Diagram 7.—Equalized valuations per teacher in 1011 common, 79 union free, and 104 city and village school districts, illustrating Table 29

a large number of common school districts that have as high valuations as the wealthier cities, and that, although the cities are scattered widely as regards wealth, the common school districts show even a more extensive distribution. It is important to point out also that from these facts it is clear (1) that *all* common school dis-

tricts should not be considered to be poorer than city districts, and (2) that the poorest villages and cities are in a situation similar to the median rural school districts.

What is the Remedy for the Situation thus Revealed?

The first question that arises is whether it is necessary to have schools in these low-valuation common school districts, and if not, might it not be advisable to combine districts in such a way that all of them would have at least a minimum of equalized valuations which would make possible the support of an efficient school by the levying of a reasonable tax? The complete answer to this question cannot be discussed here; it is sufficient to point out the relationship that exists between the average daily attendance and the valuation per teacher in the 571 common school districts situated in Dela-

Table 30.—Relationship Between Average Daily Attendance Per Teacher and Equalized Valuation Per Teacher in 571 Common School Districts of Delaware, Monroe and Tompkins Counties

Average daily attendance	Number of schools	Percent	Median valuation
1– 5	63	10	$49,444
6–10	171	30	78,684
11–15	152	27	112,500
16–20	101	18	161,666
21–25	84	15	236,000
..	571	100	..

Median attendance..... 12.68
Median valuation..... $109,318
r = + .587

ware, Monroe and Tompkins Counties. Table 30 shows in the second column the number of schools having each of the average daily attendances indicated in the first column, in the third column the percent of districts in each group and in the fourth column the median valuation of the districts in each group.

This table proves there is a direct positive correlation between

average daily attendances and the equalized valuations, which means that the schools with the lowest attendance are in the poorest districts and the schools with the highest attendance are in the richest districts. If it is possible in any way to reduce the number of these schools with smaller attendance, it will contribute considerably to the efficiency of school administration.

CHAPTER VI

TAX-RATES

IN ORDER to study the tax-rates in the school districts of the State of New York it was necessary for the same reasons as stated in connection with valuations to eliminate the differences among the various districts arising from the different rates of assessment observed by the assessors in the various towns of the State. The equalization rates furnished by the State Tax Commission referred to under the previous head were used to transmute the actual tax-rates as levied into the "equalized" tax-rates as they are called in the State of New York. This was done by multiplying the tax-rate as levied in any district by its rate of equalization. Thus if the tax-rate is five mills and the rate of equalization .75 the equalized tax-rate is 3.75 mills.

In Common School Districts

Table 31 gives the distribution of the tax-rates in 1070 school districts situated in the 24 supervisory districts chosen for special study. This table not only shows wide deviations within each and every one of the supervisory districts, but also wide variations between the supervisory districts themselves. Thus in supervisory district No. 1 of Delaware County two school districts levy a tax of less than two mills, while three districts levy a tax of more than 30 mills.

There are great differences between the various supervisory districts as well, as is shown by Monroe No. 3, which has a median tax-rate of 2.98 mills, while Oswego No. 2 has a median tax-rate of 9.91 mills; between these two extremes lie Delaware No. 5 and No. 6, and Greene No. 1 with median tax-rates of 5.50, 5.50 and 5.68 mills respectively.

TABLE 31.—EQUALIZED TAX-RATES OF 1070 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Equalized tax-rates, mills	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0– 0.99	..	1	..	..	..	..	2	1	2	1	..	1	..	..	1	1	..	..	..	..	..	..	..	..	10
1– 1.99	2	..	7	2	2	1	3	4	1	7	..	..	1	4	3	5	1	..	3	..	..	1	2	1	50
2– 2.99	..	1	9	6	8	5	11	9	25	13	1	2	2	2	6	9	5	3	4	..	4	3	3	2	133
3– 3.99	2	4	5	10	8	7	13	10	10	11	3	7	1	4	9	15	3	3	9	1	3	9	9	8	164
4– 4.99	6	5	3	10	5	9	3	8	8	6	4	2	3	1	5	6	2	5	5	1	4	6	6	9	122
5– 5.99	9	5	1	5	5	2	5	2	6	2	5	7	9	4	3	3	11	12	3	5	4	4	7	9	128
6– 6.99	3	9	2	5	3	10	2	2	2	1	6	6	8	7	2	2	11	7	5	3	4	2	5	6	113
7– 7.99	5	3	5	3	7	4	..	..	..	3	5	5	5	8	..	1	1	4	3	4	1	5	4	2	78
8– 8.99	2	4	7	6	5	1	..	2	1	..	4	2	7	1	2	..	..	5	1	5	4	3	2	..	64
9– 9.99	6	3	2	..	3	2	..	..	..	..	2	3	2	2	..	..	..	5	..	6	4	4	..	3	47
10–10.99	5	1	3	4	3	..	..	..	..	..	..	3	3	4	1	..	1	2	..	4	..	4	..	2	40
11–11.99	4	5	2	..	1	1	..	..	..	..	2	..	3	2	..	..	..	1	..	4	2	2	..	..	29
12–12.99	2	..	1	2	..	1	..	..	..	..	..	3	2	1	..	..	1	..	1	4	2	5	..	..	25
13–13.99	1	2	..	..	..	1	..	..	..	..	1	..	1	1	..	..	..	1	..	1	1	2	..	..	12
14–14.99	1	1	..	..	..	..	..	..	..	..	..	..	3	3	..	..	..	..	..	2	..	2	..	..	12
15–15.99	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	..	..	8
16–16.99	1	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	6
17–17.99	1	1	..	1	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	1	..	..	7
18–18.99	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	3
19–19.99	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	1	..	..	4
20–20.99	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	2
21–21.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
22–22.99	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
23–23.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24–24.99	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3

25–25.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
26–26.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27–27.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
28–28.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30–30.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
31–31.99	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
32–32.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
33–33.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2
40.00 and over	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total	54	50	50	54	51	46	39	38	55	44	38	41	52	44	33	42	37	48	34	49	34	57	38	42	1070
Ranks	23	18	14	9	11	12	3	5	1	2	19	16	21	20	6	4	13	15	7	24	17	22	8	10	..
Median equalized tax-rates	8.00	7.00	6.00	4.90	5.50	5.50	3.26	3.50	2.98	3.09	7.00	6.25	7.40	7.00	3.72	3.40	5.68	6.14	4.20	9.91	6.50	7.70	4.83	5.10	5.44

The median tax-rate for the 1070 districts probably represents with a fair degree of accuracy the median tax-rate in rural school districts throughout the State. This median is 5.44 mills. It should also be pointed out that there are certain supervisory districts in which the variation of tax-rates among the various districts is much narrower than in Delaware; among those which are conspicuous for slight variations are Monroe No. 1, No. 2, No. 3, Erie No. 1 and Suffolk No. 1, all of which have low tax-rates. Table 32 contains a list of the names of those districts situated in each of the supervisory districts of Delaware, Monroe and Tompkins Counties which are conspicuous either for low or high tax-rates. They illustrate all the more plainly the wide differences in the tax burden imposed upon the people in the various rural school communities of the State.

IN UNION FREE, VILLAGE AND CITY DISTRICTS

Table 33, giving the true tax-rates for union free school districts, shows the same wide variation as was found in common school districts when taken both as entire groups and within the supervisory districts. Table 34 shows the same data for the various classes of cities and villages

TABLE 32.—SCHOOL DISTRICTS IN DELAWARE, MONROE AND TOMPKINS COUNTIES REPRESENTING EXTREMES IN EQUALIZED TAX-RATE

Delaware No. 1			Delaware No. 5			Monroe No. 3		
Mills		No.	Mills		No.	Mills		No.
1.32	Sidney	3	1.09	Franklin	2	.75	Clarkson	6
1.99	"	2	1.83	Davenport	3	.75	Greece	5
3.63	"	15	2.24	Franklin	23	1.84	Clarkson	9
30.46	Tompkins	15	10.79	Meredith	8	6.18	Parma	11
32.40	"	24	11.30	"	12	6.30	"	1
33.60	Masonville	12	15.88	Davenport	12	8.46	"	3

Delaware No. 2			Delaware No. 6			Monroe No. 4		
Mills		No.	Mills		No.	Mills		No.
.76	Colchester	2	1.93	Harpersfield	14	.83	Chili	9
3.16	Hancock	19	2.47	Bovina	8	1.52	"	6
2.97	"	10	2.76	Harpersfield	15	1.53	"	2
16.99	Colchester	28	13.89	Kortright	15	7.15	Gates	7
17.88	"	30	24.50	"	16	7.31	Riga	2
22.62	"	16	31.60	"	11	7.45	Gates	1

Delaware No. 3			Monroe No. 1			Tompkins No. 1		
Mills		No.	Mills		No.	Mills		No.
1.24	Walton	16	.48	Brighton	1	2.94	Ulysses	14
1.29	"	10	.91	"	8	3.62	"	11
1.32	"	2	1.38	"	4	3.74	Enfield	1
15.55	Delhi	18	5.95	Penfield	3	17.00	Newfield	14
16.23	"	14	6.18	Irondequoit	5	19.53	"	8
38.25	Hamden	1	6.30	Penfield	13	20.37	"	15

Delaware No. 4			Monroe No. 2			Tompkins No. 2		
Mills		No.	Mills		No.	Mills		No.
1.60	Roxbury	4	.73	Rush	2	.08	Groton	12
1.82	"	17	1.61	"	7	2.66	Lansing	5
2.38	"	14	1.73	Perinton	12	2.72	Ithaca	6
12.40	Andes	9	6.22	Pittsford	5	12.43	Groton	17
12.63	"	17	8.19	Perinton	1	12.50	Lansing	22
17.65	Middletown	7	8.50	"	2	12.59	Groton	18

Tompkins No. 3		
Mills		No.
1.56	Dryden	25
2.37	"	26
2.66	"	7
14.70	Caroline	2
18.17	Danty	7
19.17	"	1

Table 33.—Equalized Tax-Rates in 79 Union Free School Districts in the 24 Supervisory Districts

Equalized tax-rates, mills	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
3– 3.99	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	4
4– 4.99	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	4
5– 5.99	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	1	..	..	3
6– 6.99	..	..	..	1	..	..	1	2	..	2	..	..	..	1	1	1	..	..	..	..	..	..	3	..	12
7– 7.99	..	..	..	1	..	..	1	1	..	..	..	..	..	..	2	..	1	..	..	1	..	..	1	..	8
8– 8.99	..	1	..	..	1	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	1	1	2	9
9– 9.99	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	2	..	6
10–10.99	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	..	1	2	1	3	1	1	2	..	14
11–11.99	1	..	..	..	..	..	1	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	1	6
12–12.99	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	4
13–13.99	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	4
14–14.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1
15–15.99	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	2
16–16.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
17–17.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18–18.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19–19.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20–20.99	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
Total.....	1	2	2	4	2	2	4	5	1	3	2	3	2	2	5	4	3	3	1	4	3	5	13	3	79

Median = 8.94 mills.

under superintendents. The most striking fact established by this table is that, when taking them as groups, the larger the population the smaller the tax-rates and the smaller the population the larger the tax-rates.

TABLE 34.—EQUALIZED TAX-RATES IN 104 FIRST-, SECOND-, AND THIRD-CLASS CITIES AND VILLAGES UNDER SUPERINTENDENTS

Equalized tax-rates, mills	First-class cities	Second-class cities	Third-class cities	Villages under superintendents	Total
2– 2.99	..	1	..	..	1
3– 3.99	..	..	..	..	..
4– 4.99	..	..	2	..	2
5– 5.99	1	1	4	3	9
6– 6.99	1	1	8	10	20
7– 7.99	1	2	8	11	22
8– 8.99	..	2	10	7	19
9– 9.99	..	..	6	4	10
10–10.99	..	..	6	2	8
11–11.99	..	..	3	3	6
12–12.99	..	..	1	..	1
13–13.99	..	..	..	2	2
14–14.99	..	..	..	2	2
15–15.99	..	..	..	1	1
16 and over	..	..	1	..	1
Total.....	3	7	49	45	104

Median equalized tax-rate:
Cities..... 7.95
Villages..... 7.86
Total..... 7.90

COMPARISON OF ALL CLASSES OF DISTRICTS

The data for all classes of districts are brought together in Table 35. This table shows that it is the union free school districts taken as a group which have the highest tax-rates in the State. Thus it seems to be true that the principle just deduced for cities may be extended to include union free school districts, namely, the smaller the population of the district, the higher the tax-rate, and the larger,

TABLE 35.—EQUALIZED TAX-RATES IN 1070 COMMON SCHOOL DISTRICTS, 79 UNION FREE SCHOOL DISTRICTS AND 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Equalized tax-rates, mills	Common school districts	Union free school districts	Villages and cities under superintendents	Total
0– 0.99	10	..	..	10
1– 1.99	50	..	..	50
2– 2.99	133	..	1	134
3– 3.99	164	4	..	168
4– 4.99	122	4	2	129
5– 5.99	128	3	9	139
6– 6.99	113	12	20	145
7– 7.99	78	8	22	108
8– 8.99	64	9	19	92
9– 9.99	47	6	10	63
10–10.99	40	14	8	62
11–11.99	29	6	6	41
12–12.99	25	4	1	30
13–13.99	12	4	2	18
14–14.99	12	1	2	15
15–15.99	8	2	1	11
16–16.99	6	1	..	7
17–17.99	7	..	..	7
18–18.99	3	..	..	3
19–19.99	4	..	..	4
20–20.99	2	1	..	3
21–21.99	1	..	..	1
22–22.99	1	..	..	1
23–23.99	..	..	..	..
24–24.99	3	..	..	3
25–25.99	1	..	..	1
26–26.99	..	..	..	..
27–27.99	1	..	..	1
28–28.99	..	..	..	..
29–29.99	..	..	..	..
30–30.99	1	..	..	1
31–31.99	1	..	..	1
32–32.99	1	..	..	1
33–33.99	2	..	..	2
34.00 and over	1	..	1	2
Total.....	1,070	79	104	1,253
Median equalized tax-rates..	5.44	8.94	7.90	5.97

TABLE 36.—EQUALIZED VALUATIONS PER TEACHER AND EQUALIZED TAX-RATES IN 573 COMMON SCHOOL DISTRICTS HAVING AN AVERAGE DAILY ATTENDANCE OF OVER 10—DELAWARE, MONROE AND TOMPKINS COUNTIES

Valuations in thousands of dollars	Mills																						Total
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
0–9	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3
10–19	..	..	1	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	4
20–29	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	2	2	2	1	..	..	1	9
30–39	..	..	..	1	..	..	1	4	4	2	9	4	2	1	1	..	2	3	..	..	..	..	..	34
40–49	..	..	2	..	..	..	7	3	6	4	3	7	5	..	1	..	..	..	..	..	..	..	..	38
50–59	..	..	..	2	..	1	7	11	10	4	4	2	..	2	..	..	..	1	..	..	..	..	..	44
60–69	2	..	..	..	1	7	8	2	2	2	2	1	2	1	2	..	..	..	..	..	..	..	..	32
70–79	..	..	1	1	6	12	4	7	3	4	1	..	1	..	..	..	..	..	..	..	..	..	..	40
80–89	..	..	2	2	10	7	4	1	5	2	2	1	..	..	..	..	..	..	..	..	..	..	..	36
90–99	..	2	1	4	5	6	2	1	4	1	..	..	..	..	..	..	..	..	..	..	..	..	..	26
100–109	1	1	1	4	2	6	1	3	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	22
110–119	..	..	1	7	4	2	7	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	24
120–129	..	..	4	4	7	2	3	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	23
130–139	..	1	2	3	..	1	4	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
140–149	..	..	4	7	5	6	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	25
150–159	..	2	1	..	3	1	3	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13
160–169	..	..	3	5	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
170–179	..	..	5	3	2	1	1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	15
180–189	..	..	3	..	6	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
190–199	..	..	1	1	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
200–209	..	..	..	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
210–219	..	2	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
220–229	..	..	1	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
230–239	..	1	5	4	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	12
240–249	..	1	6	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
250–259	..	..	4	5	..	2	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	14
260–269	..	1	..	3	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
270–279	..	1	3	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6
280–289	..	..	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
290–299	..	..	2	2	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6

300–309	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
310–319	..	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
320–329	..	..	5	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	6
330–339	..	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
340–349	..	1	1	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
350–359	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
360–369	..	2	1	2	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	7
370–379	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
380–389	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
390–399	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
400–499	..	2	6	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11
500–599	1	4	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
600–699	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
700–799	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
800–899	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
1,000 and over	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Total........	7	27	82	84	69	63	56	42	43	22	21	18	11	6	4	1	6	7	2	1	..	..	1	573

Median equalized tax-rate, 5.27 mills. Median equalized valuations, $109,318. r = —.746

its population, the lower the tax-rate. This principle does not extend, however, to the common school districts as a group, for the median tax-rate of this group is lower than that of any other group. The lowest taxes paid for schools in the school districts of the State of New York are paid in certain common school districts and there are so many of these low-tax school districts as to bring the median down below those of the other two groups. Notwithstanding this, it is true, however, that the highest tax-rates paid for schools in the State of New York are in certain common school districts.

RELATIONSHIP OF TAX-RATES TO OTHER FACTORS

Because of this unusual combination of low tax-rates and high tax-rates within the same class of district, it is important for us to show what relationships may exist between it and other administrative factors. Table 36 shows the relationship existing between the equalized valua-

tion per teacher and the equalized tax-rate in the common school districts of Delaware, Monroe and Tompkins Counties. Beside each valuation is given, in the appropriate columns, the number of districts that levy the tax-rate indicated in one of the headings of the respective columns. The table shows at a glance what one would naturally expect, namely, a close indirect relationship between the tax-rates and the valuations—low valuations and high tax-rates, high valuations and low tax-rates. Expressed in terms of a correlation coefficient derived according to Pearson, the relationship is r = —.746.

It is more important to ascertain the relationship between the tax-rates and the number of pupils in average daily attendance, for if it is possible to do away with the high tax-rate of schools, it will promote economy in administration. Table 37 furnishes de-

TABLE 37.—RELATIONSHIP BETWEEN AVERAGE DAILY ATTENDANCE PER TEACHER AND EQUALIZED TAX-RATE IN 574 COMMON SCHOOL DISTRICTS OF DELAWARE, MONROE AND TOMPKINS COUNTIES

Average daily attendance	Number of schools	Percent of schools	Median equalized tax-rate, mills
1– 5	63	11	6.95
6–10	170	30	3.71
11–15	152	26	5.40
16–20	103	18	4.16
21–25	86	15	3.75
..	574	100	..

Median attendance 12.77
Median equalized tax-rate ..... 5.26 mills
r = + .17

tailed information upon this point for all common school districts in Delaware, Monroe and Tompkins Counties. In the third column are found the percentages, and in the fourth column the median equalized tax-rates of districts belonging in each group. While the relationship is not quite so direct as in the case of equalized valuations, nevertheless the principle obtains that the lower

the average daily attendance, the higher the tax-rate, and the higher the average daily attendance, the lower the tax-rate. Thus it would seem that if it were practicable to abandon the schools with small enrolments, considerable economy could be brought about in rural school administration in the State of New York.

Effect of Adopting the Town as the Unit of School Support

One remedy that has frequently been suggested by various persons for the equalization of the tax burden is the abolishment of the school district as a taxing unit and the establishment of the town in its stead. Undoubtedly this is a move in the right direction.[1] It is desirable for us to answer the question regarding the effect of such action upon the tax-rates for school purposes in the various towns as now constituted. Table 56 for three different towns situated in three different counties gives sufficient data. The result may be summed up as follows: The town tax-rate for schools would be approximately the average tax-rate of the various school districts situated within it, provided schools are maintained as in the past. This means that the tax-rates of those owners of property living within districts now having a high tax-rate would have less tax to pay for schools, while those residing within districts now paying low tax-rates would have their school taxes increased.

The greatest return to come from such action as this is the extending of the benefit of the tax upon railway and other public service corporations, and creameries and similar private corporatious throughout the entire territory of the town, as is now the case in town governmental affairs. There seems to be no good reason why this should not be done. In fact, many towns in the State of New York, according to information gathered by the Survey, are still paying bonds voted to aid railways which consented to run their lines within the town. Mere justice should require that benefits of taxes levied upon such corporations should affect the entire

[1] That this enlargement of the unit of taxation does not go far enough is shown by the results of the field work, described in Chapter XII. See also Chapter VII.

town. But aside from this, there are so many ways in which the entire inhabitants of the town are tied together in common interests and responsibilities. These are realized in the maintenance of highways and for such other purposes for which the town exists, and it would seem as though the case of the highways is not different from that of the schools.

CHAPTER VII

POSSIBLE REMEDIES THROUGH LOCAL READJUSTMENTS

THE data presented in the previous chapters have established the following facts:[1]

1. That rural schools cost less per teacher than city schools.
2. That rural schools cost more per pupil than city schools.
3. That the proportion of expenses incurred for teachers is larger in rural schools than in city schools.
4. That the percentages spent for instruction, supplies, library books, operation and maintenance of building, promotion of health, are lower in rural schools than in city schools.
5. That the equalized tax-rates for schools are higher in cities than in rural communities when these are taken as groups.
6. That tax-rates in one-eighth of the rural districts of the State are higher than in any city.
7. That the equalized valuation back of each teacher is higher in cities than in rural communities when taken as a group.
8. That there are a large number of rural school districts which have higher valuations per teacher than the highest cities—12 per-cent.
9. That those rural school districts having high tax-rates generally have low costs per teacher and high costs per pupil.
10. That those districts having low valuations generally have low costs per teacher and high costs per pupil.
11. That the explanation of these contrasts lies in low average daily attendance, which is closely associated with sparse population.
12. That the tax-law, in confining the benefit of the taxes on

[1] See Chapter XIV for summary of findings relative to state or central finances.

public service corporations to those school districts through which they pass, makes great variation in the valuations and in tax-rates of districts lying in close proximity to each other.

13. That the business administration as it is carried on in district meetings and by the trustees, collectors and treasurers is wasteful in that possible economies in the expenditure of funds are not exercised. Taxes are not collected promptly, interest on funds is not obtained, and budgets are not properly prepared.

What shall be done to relieve the situation? Several possible remedies are offered:

1. To abolish the schools with small enrolments and transport the pupils thereof to other schools except in those cases in which, in the opinion of the State Commissioner of Education, the continuance of the school is necessary because of unusual climatic or topographical conditions. This is a partial remedy. It will secure a large enough number of pupils per teacher, make it more practicable to provide first class schoolhouses and adequate supplies and equipment, and thus greatly increase the quality of the educational product. Whether it will reduce the total cost of schools depends upon the cost of transportation and upon the educational facilities that will be provided. In case one small school is consolidated with another, the savings in cost will depend very largely upon the cost of transportation. If a combination of schools is carried to the point where several teachers are employed with full quotas of pupils, the tendency has been in other states to increase the salaries of these teachers and to provide proper supplies and equipment for them. Hence the waste of poor teachers and poor equipment at high cost is transformed into an efficient school at low pupil costs, but without the actual decreasing of the tax-rates. Thus they get a product of standard quality at about the same cost as that previously paid for a product of poor quality.

Such a plan as this would reduce the necessity of looking after a number of schools scattered over a given territory. Concentrating maintenance in one place facilitates control and supervision of the school plant and makes it more efficient and economical, as was shown in Chapter III.

The state-wide institution, the "contract school," is proof of the

wisdom of abandoning the small school. It has been established by the farmers themselves because it has lowered tax-rates. Districts with a smaller number of pupils find it cheaper to pay tuition to a neighboring district in accordance with the terms of a contract than to keep up their own schools.

The best interests of the State, as a whole, and of most of the rural communities in the State, demand that small schools be abolished in order to promote economy and efficiency of administration. If it is not possible to abolish these small schools by law, the system of state aid should be so formulated as to promote this aim. Just how far this combination of rural schools should be carried beyond that of the small attended rural schools has been treated in detail in the section of the Survey dealing with administration and supervision.

2. To reorganize the schools within each community in such a way as will secure the most economic and efficient school administration, including the proper provision for high school education and also the merging of the common school districts into a new and larger district. This solution is a better one than that first proposed, which provided for the abolition of only the small schools. It is a natural outcome of the first plan because ordinarily it will be found that while the elimination of the small schools is essential, nevertheless the best solution lies in the reorganization of practically all of the schools of the community and their concentration in a community center.

As has been said in connection with the previous recommendation, it is also true that in complete community consolidation the costs depend upon the quality of the teaching secured and the additional supplies and equipment furnished beyond those provided for in the scattered schools. Naturally, the addition of high schools, the provision for libraries, the introduction of special departments of agriculture and of home-making, the employment of special teachers in music and drawing, etc., will increase costs beyond those of the former schools. The contrast between the costs of this type of school and those of the one-teacher rural school can be fairly measured by the differences in the tax-rates in union free school districts and common school districts. As has been shown in the

previous chapter, the costs are considerably more than many communities would feel they could undertake. Under these circumstances state aid should come in to supplement local effort. Experience has shown in a number of instances in the State that where such well-developed schools were established in communities with relatively low valuations they have not been able to maintain them on an efficient basis under the present system of state aid, while, on the other hand, communities that are wealthier have not felt the strain to an unreasonable degree.

In order that the differences might be seen between the advantages offered by the one-teacher rural schools and by such combined and extended schools as are contemplated in this recommendation, and also in order that proof of the practicability of this plan may be offered, a special study of one of these schools was made by Dr. LeRoy A. King, a member of the Field Staff. The consolidated school selected was the Orchard Park School, situated in East Hamburg, Erie County. It was studied with a view of ascertaining how much it would cost the district to furnish in its old one-teacher schools the same educational facilities now provided in its combined school. His account is given herewith:

"The Consolidated Orchard Park High School, composed of Union Free School District No. 1 and Common School Districts Nos. 1, 2, 7, 9, and 10, was formed in April, 1914, with the exception of district No. 9 which was dissolved by order of the District Superintendent in March, 1915, and amalgamated with the consolidated district. The school is located about 15 miles from Buffalo in the town of East Hamburg. A modern well-equipped school building costing approximately $75,000 was constructed as a result of the consolidation, which now accommodates 400 children, of whom 100 are enrolled in the academic-vocational high school.

"In 1919 the faculty of the school was composed of the supervisors of the special activities and 17 teachers of whom eight comprise the high school faculty. The organization, the course of study, and the instruction are modern and progressive. The program of studies includes the special subjects—physical education, drawing, music, industrial education, home economics—in charge of special supervisors. The school is well equipped in all departments for instructional purposes and contains a good-sized, modern school library.

"In assuming that it were feasible and practicable to abolish the consolidation plan and to have the schools revert to the former common school district scheme, certain fundamental factors would have to receive careful consideration.

"Three of the five district schools that were closed are located on plots of ground less than three-quarters of an acre in area, and the other two on plots of approximately an acre, which fact would mean that additional purchases of land would be necessary in order to give the children the same playground facilities that they are now enjoying at the central plant.

"One of the buildings was erected approximately 13 years ago and the others are very old, practically unfit for school purposes. All of the buildings are of the box-car type with one room, no basements, and with outdoor toilets, etc. Consequently to resume the old organization, five new buildings would be required; or at least four new ones, and one greatly remodeled.

"Two of the five buildings are improperly lighted; and four of them do not have a proper heating plant. Only one of the five has a patented jacketed stove and not any of the buildings has even a semblance of a modern ventilation system. Nor are there chemical toilets to be found in any of the buildings. To provide each one of these schools with modern heating plants, ventilating systems, and water and toilet facilities such as are found in the present consolidated building, would be exceedingly expensive for each school district.

"Furthermore, districts No. 7 and No. 9 are so largely attended that it would be necessary to erect two two-room buildings or at least to remodel substantially by constructing additions to two old buildings for the use of the extra teachers required.

"New furniture would have to be provided in at least four of the schools; in fact, the District Superintendent said that it would practically be necessary to provide and equip five new buildings, if the individual school plants were to be at all comparable with the present consolidated school.

"In order to provide instruction on the same basis as now obtains in the consolidated school, a great deal of additional material and equipment for instructional purposes would have to be purchased, including text books, maps, globes, pictures, etc. Industrial education, home economics, science laboratories, and physical education would, of course, require special equipment entailing considerable cost for each of the five buildings, if the same facilities are to be maintained in the respective districts as now exist in the consolidated school.

"Class recitations in the present carefully graded consolidated school are 30 or 40 minutes in length, while, if the schools were located in the five centers, it would be impossible to have class recitations longer than 10, 15 or 20 minutes, as now generally found in the typical one-teacher ungraded school.

"In the consolidated school the school lunch is also provided. This would mean that special equipment and facilities for furnishing school lunches would have to be secured for each of the five districts.

"In view of the results of the investigation of the status of the teaching force in common school districts as compared with union free school districts it is doubtful whether teachers could be secured in these five districts with the same professional and educational qualifications as those teaching in the consolidated school even assuming that the same salaries were paid. It would also be essential that at least two teachers in each of the special school activities such as music, drawing, industrial education, domestic science, physical education, etc., be engaged to give the children in each of the outlying schools the same quality and amount of training that they are now receiving, by going from school to school. It must also be remembered in this connection that there would be considerable expense and unnecessary loss of time in having these teachers visit the different schools to carry on this work.

"The children would naturally be deprived of the opportunities of participation in the school activities peculiar to a larger school unit. The literary society, the debating club, the athletic teams, the orchestra, the social opportunities—all of these afford means of educational and social development and are considered indispensable in the modern school organization.

"It must be remembered that even if a plan such as this suggested could be carried on at less cost than the one now in operation it would still be necessary to provide high school education for all the children who had completed the eighth grade, inasmuch as it would certainly be impracticable to organize a high school

in each of the five outlying schools. The only logical method would be to have the high school pupils transported to the same central school, as is being done at the present time. This factor must be taken into account in comparing the cost of these two types of organization.

	Consolidated unit	Five common school districts
Capital outlay	$75,000.00 (originally) 47,000.00 (remaining indebtedness)	$48,050.00
Current expenses	23,105.54	10,257.00
Debt service	6,995.80	5,285.50
Total amount to be raised per year	31,831.06	15,542.50
State aid	4,728.11	3,000.00 (approx.)
Short term loan and misc. sources	4,363.66	..
Amount to be raised by local tax	22,739.29	12,542.50

"The items of cost in the accompanying table under the consolidated unit were taken from the report of the district for the fiscal year 1919–1920 and the amounts as listed are largely self-explanatory. The amount raised by local taxes was based on a tax-rate of nine mills, which was a considerable increase over the tax-rate of the individual common school districts before the consolidated project became effective.

"In the determination of the capital outlay for the five common school districts it was necessary to provide for three new one-room buildings, one new two-room building, and an addition to an old building to accommodate two classes. It also includes the cost of ground, school furniture, agriculture and home economics equipment, and a well for each of the buildings to provide running water and a flush system.

"The amount of money charged to these various items was based on the standards used in connection with the organization of new projects in this Survey, and also on the expert judgment of the local District Superintendent. In computing the current expenses of the five districts, including maintenance, transportation, and salaries paid to teachers and janitors, the standards were obtained from the prevailing practice both in the consolidated unit and in the other common school districts of the same town. The debt service includes $2,402.50, one-twentieth of the entire capital outlay provided annually for the purpose of retiring bonds.

"In comparing the cost of education per child in the reorganization of the five common school districts upon the basis of the standards herein proposed with the cost in the consolidated unit, the amount of money expended for current expenses divided by 390, the enrolment in the consolidated school, is equivalent to $59 per child; while in the redistributed district schools the cost would be the current expenses divided by 140, the approximate number of children, or $73 per child. In other words, in attempting to give the children now attending the central school in the consolidated unit the same educational opportunities in their respective common school districts it would cost approximately $14 more per child or an increased cost of 23.7 percent."

Thus it is shown that the right kind of educational facilities can be more cheaply furnished by abandoning the one-room schools and transporting the children to a central school.

3. The adoption of the community as the unit of school support but not as the unit of control.

A remedy that has been recommended by the administration division of the Survey for the equalization of the tax burden is the abolition of the school districts as taxing units and the establishment of the "community unit" in their stead. While this is a move in the right direction, it does not go far enough and needs to be supplemented by some plan similar to Form II described in Chapter X. Its effect upon the tax-rates may be summed up as follows: The community tax-rate for schools would be approximately the average tax-rate of the various school districts situated within it, provided schools are maintained as in the past. This means that the tax-rates of those owners of property living within districts now having a high tax-rate would pay lower taxes for schools, while those residing within districts now paying low tax-rates would have their school taxes increased.[1]

Other benefits coming from this arrangement would be the reduction in the number of tax collectors and treasurers, more efficient planning of expenditures, more economical purchasing, more prompt collection of taxes, more interest received from money in the school treasury, and better accounting, which would again result in better keeping of costs and planning of the budget.

While this recommendation has many advantages it does not of itself provide for the abolition of the small schools and for the organization of the most efficient schools of the entire community. To the extent that it would not bring about the abolition of the small schools, it would not produce the economies; and to the extent that it did not bring about the most efficient school organization, it would not result in the highest cost efficiency. While this can be accepted as a step in the right direction, the State would not be warranted, in the judgment of this Section of the Survey, in granting aid in any way which will encourage poor or imperfect school organization.

Bonds and Other Debts

Another consideration of very great importance is, How shall the payment of the debts of the existing districts be made when a larger

[1] See pages 90 and 192. Notice, however, data are for different years.

district is established as the fiscal unit, such as, the community district? Experience with the township law of 1917 shows the impracticability of endeavoring to continue any phase of the existing organization for the purpose of paying debts. The Survey recommends that the new districts assume all indebtedness of the districts which go to make up its component parts in just the same way that the new and larger district will become the possessor of all the property within the territory included. Any attempt to do otherwise will lead to a wasteful expenditure of energy and time, and will constitute such a source of differences of opinion among the various sections of the town as would seriously interfere with the efficiency of the schools. While this plan or any other plan will work to the advantage of some people and to the disadvantage of others, it will not harm any person to any appreciable extent.

Such maladjustment of past actions to new conditions is always apparent in reorganization of every sort. Expenditures have necessarily been made on the basis of the organization prevailing at the time. When a change in organization is made there will always be occasions found in which, had the reorganization been foreseen, certain expenditures would not have been made. Experience has shown that the best adjustments are, in the end, made by the new organization taking over all the responsibilities as well as the authorities of the old and that to continue the old even in one respect hampers the operation of the new.

School Support in Intermediate Districts

By intermediate districts is meant a unit of territory larger than a community district. It may be the county or a portion of the county. The duties of the officers thereof will be partially local and partially central or state. According to a well-recognized principle of government each territorial unit should itself bear the expenses, in so far as it is able, of the functions that are performed by it or for it. While this is not the place to forecast the nature of the authority and responsibilities that may be placed upon intermediate boards, superintendents, and other officers, it may be laid down as a principle that those functions that are local in character should be defrayed by a local tax; that the State should

pay such proportion of the expenses as are incurred in performing central or State functions, and that the State should also take into account the ability of the intermediate district to support its work in some such way as is shown for local districts in the treatment of General and Special Aid. It is recommended, therefore, that any intermediate board that may be constituted be given the authority to levy either a local tax directly upon the property contained in it or upon the local districts composing it in proportion to the equalized valuations thereof. It is also recommended that the State pay such portion of the salary of one or more of the local superintendents according to the amount of time required for performing state functions so that there may be a just distribution of costs between central and intermediate territories. Finally, it is recommended that after such districts are formed a study be made of their relative abilities to meet their local expenses and that some such forms of General and Special Aid, similar to those recommended for local districts, be instituted. In this way General Aid will take care of any inability to support the usual functions, while Special Aid may be used to support types of supervision that intermediate boards would not ordinarily undertake.

CHAPTER VIII

THE THEORY OF STATE SUPPORT OF LOCAL SCHOOLS

Historical Background

ORIGINALLY local schools were supported entirely from local sources. State support arose from the distribution of the income from permanent State school funds or from distribution of special funds or direct appropriations from the legislature. As the money from these sources became available, the question arose as to how it should be distributed. Since local self government was strong throughout all the states at that time, naturally each community desired to obtain as large a share as possible. Various solutions were reached and in some states the first view taken was that inasmuch as the people of the various communities had paid state taxes in proportion to the valuation of their properties, the school money now available for distribution should be returned to the local communities in the same proportion. In other states the plan adopted was to distribute the income on the basis of the total number of persons paying taxes. Both of these plans were based on the idea of the *rights* of local communities to share in state money.

Later it was proposed that such income be distributed upon the basis of the number of children of school age. Improvements upon this plan were represented in the distributions—(1) according to enrolment, (2) according to average number belonging, (3) according to average daily attendance, and (4) according to aggregate attendance. Each of these methods recognized the *needs* of the various districts rather than their *rights* and was indicative of a stronger degree of state consciousness. They show that a beginning had been made upon the part of the State in its desire to promote the best

interests of the schools in all the local districts of the State. The grants upon the basis of attendance incorporated an additional element in that better attendance in schools was promoted and, in the case of aggregate attendance, longer terms of schools were established. Thus was recognized for the first time the principle of stimulating each district to higher efficiency in the conduct of its schools.

The teacher basis, or quota as it is commonly known in the State of New York, differs from those of the previous group in that it recognizes the element of cost in the conduct of the schools. The expense of schools is not affected so much by the attendance of pupils or by the number of pupils enrolled as it is by the number of teachers employed. However, the teacher basis totally lacks the stimulation of districts to secure good attendance unless it is in some way combined with the attendance basis.

Both the pupil and teacher bases represent efforts to distribute the money in proportion to the needs of the schools without regard to any right which the citizens of the various communities might have by virtue of their membership in the State or by their paying taxes to the support of the central government.

Combinations of these various plans have been established in various states of the Union. The plan prevalent in New York previous to 1885, by which one-third of the state school money was distributed on the basis of population, one-third on the basis of average daily attendance and one-third on the basis of number of teachers, was a typical combination. The basis of population represents a remnant from the old plan which probably had to be retained so as to carry the newer elements of the plan through the Legislature.

In more recent years an account has been taken of the amount of property taxable for school purposes in the various local communities, particularly with those school districts that have low valuations. Such a plan as this is found in a number of the New England States. The best thought at the present time favors the extension of the plan upward so as to include districts of higher valuations.

Another element of considerable importance, which has not yet been incorporated into the minds of legislators, is the amount of

money that districts spend in support of schools. While the property valuation of a district represents "its ability" to support schools, it is not in any way an index of the quality of teacher employed, of the schoolhouse erected, or of the types of equipment furnished. It is possible for two districts to have equal ability but to expend widely different amounts in the support of schools—one will support schools liberally and the other in a niggardly fashion. Whether it is desirable that a state should take into account in the distribution of its funds "the effort" that districts make will receive attention in the further treatment of this question. It is desirable first to consider the theory and principles underlying school support.

Theory of School Support

It has been found necessary to create states in order to secure protection, liberty and justice, and to promote individual welfare, but at the same time a very large measure of control has been given back by these states to the local communities in order that each individual may have the largest practicable control of those governmental affairs with which he comes in immediate contact. Control of the tax-rate and of the expenditure of money raised in local communities is one of the most essential features of our democracy and is highly prized by all American citizens.

We must expect, therefore, as a principle of the financial administration of schools, that local support shall be fundamental in any system that may be established. It does not follow, however, that school support should be entirely local. There are certain reasons why it should not be so. It has been shown in this study (Chapter V) that there are great differences in the ability of various districts to support schools, and that it is difficult for many of them to maintain schools of even poor quality. It has also been shown that there are great differences among different communities in their conceptions of a proper standard of school for an American community (Chapter IV). Some communities seem to realize that the future of our nation depends very largely upon the character of education given in the schools, and that the future happiness and success in life of their children are likewise dependent upon the kind of schooling they receive. On the contrary, there are

other communities, many of which are well-to-do, that seem to look upon the school not as an opportunity for them to serve their country and to promote the welfare of their children, but rather as a burdensome thing which has been imposed upon them from without, or, if they do accept the school as a worthy institution, their standards of what a good school should be are so low that the interests of the State as a whole, the well-being of the particular community in which the school is situated, and the future happiness of the children living within it are each and all affected in a harmful manner.

Under such circumstances as these, when districts are unable to support schools, or if able, are not willing to support schools of a quality corresponding to their wealth, the question arises whether the state government representing all the people cannot and should not do something to improve the conditions in such districts. In case of invasion by foreign troops or in case of mob violence which cannot be controlled by the local authorities, all would say that state money should be spent in restoring peace and order, not only to benefit the communities in question, but also to insure the future well-being of the remainder of the State. While the effects of a poor school upon a particular community and upon the portions of the State lying outside of it are not so apparent nor so immediate as those of an invasion or mob, nevertheless the harm is just as certain and expenditure of state funds is as fully warranted in this case as in the former. It is also true that if state money can be used to stamp out an epidemic of tuberculosis or hog cholera, it can likewise be used to prevent inferior teaching.

Furthermore, the advancement of the general welfare through the expenditure of state money has been just as generally recognized as has the maintenance of peace and order and protection from disease. State money is spent to promote state fairs, experiments in agriculture, and extension courses in a variety of subjects relating to farming. Through such expenditures as these the standards as to what constitutes good farming are constantly rising, and not only the farmers, but all who consume the products of the farm are benefited thereby. By the giving of instruction, it pays all the people of the State to stimulate farmers, to obtain the most and the best from

the land they possess. It pays also to grant rewards to those farmers and to those boys and girls of the farm who have done particularly meritorious work. The benefits that come from this sort of reward through the stimulation of all people of the State are much greater than the cost.

It is the same in education as in farming. The State should always do something to stimulate every school district to do its best. Rewards ought to be granted likewise to school districts, teachers and pupils who do particularly meritorious pieces of work. The benefits that will result for the entire State, not to mention those that will come to the particular district, will be much greater than the cost.

Thus far we have been speaking of the reasons why a State should grant support from its state government to local schools in order to make support most efficient. It is important for us now to consider in what way aid should be administered in order to promote the highest degree of efficiency in the machinery of state and local school administration. Support of schools and control of schools are closely inter-related and they should be made to strengthen each other.

This phase of the subject has two aspects: (1) State agencies of control, and (2) local agencies. State aid should be distributed in such a way as to promote the efficient participation of citizens in the exercise of citizenship. The converse of this proposition is that it should not be so administered as to promote bureaucracy or autocratic control in either state, county, or local education offices. This can be accomplished if, on the one hand, the withholding of funds by state officers is exercised only in proportion to the seriousness of the shortcoming; and if, on the other hand, right action unfailingly meets its reward. The facts are that in a fairly large number of the communities of every state we need a change in attitude on the part of the citizens toward the schools. These communities can be frequently led to change their vote and to substitute right action for wrong action over a sufficiently long period of years to bring about a fundamental change in their attitudes toward the benefits of education. That which a citizen learns through the operation of his own action becomes established, while

that which is forced upon him against his will he opposes. It is, therefore, fundamental in state aid that we leave final decision to the local communities, and allow them to choose what they think is best. In the doing of this we will have stronger agencies in the making of a better government and a better society.

This view is in harmony with the principle of business management which requires that superior officers should make it their duty to furnish those conditions which will permit and stimulate subordinates to give their best services. Likewise state school officers should embrace every opportunity to gain the fullest possible knowledge of local conditions, to formulate plans in the light of that knowledge, to stimulate local communities to adopt these plans (for it must be remembered that local school officers are not responsible to state school officers as are superintendents in factories to the managers of business enterprises) and to outline every possible means of improving the efficiency of the local schools. The system of state aid which does not take cognizance of local contacts and which does not stimulate local interest does not promote the highest efficiency either in the local or central offices or in the system as a whole.

If a system of state aid is working properly, not only are the most advanced districts encouraged and thus the entire body kept moving, but also those districts which are lagging behind are constantly stimulated to come up to the standards that have already been adopted through the experience of the more progressive districts.

Objects of State Aid.—The objects of state aid may then be summed up as follows: State aid should be administered in such a way as to make good schools possible in all communities of the state, so that no community may have a reasonable excuse for a poor school. It ought also to stimulate every school district in the state to have better schools, thereby constantly raising the standard of education and promoting the continual progress of the life of all the people in the state. It also ought to reward any school that takes a new step in an efficient manner because of the meritorious action that such a step indicates. It should do all these things, not only to protect the state from ignorance in the exercise of the ballot and to provide leaders, but also to promote in every possible way

the individual welfare of every person in it. In applying this principle to schools, it means that all forms of aid should be utilized so as to guarantee for each child that education which is best to fit him for life, irrespective of the particular community in which he may happen to live. It is upon such grounds as these that the state is justified in taking, through taxation, a citizen's money and expending it in places other than those in which he resides. It is done because the state as a whole and in most cases each citizen will benefit from it in far greater proportion than the cost.

Proportion of Central and Local Support

It is difficult to determine in just what proportion the support of local schools should be distributed between the state and local governments. Since the justification of state aid rests largely on the differences of ability of local districts to support the schools and upon differences in conceptions in the various districts as to the proper standards and scope of schools, it would seem to follow that the amount of state aid would be somewhat in direct proportion to the extent of the differences in both respects. If that be true, it is evident then that the proportion cannot be well determined for any state until a careful study of the conditions in these respects is made. It would seem, too, that a correct proportion for one state would not be the right one for another. There would probably be so wide a variation among the various states that it would not be possible to express the proportion in a single figure.

Another factor of great importance is the taxation system which prevails in the State. A state making large use of income, inheritance and business taxes collected through a central or state agency would be expected to distribute to local governments larger amounts of money than those in which such taxes are not levied. The question of the amount of special funds given by the state to the local governments rather than to school districts should also be taken into consideration. The great variety of conditions and the complexity of the tax system in many states make it very difficult to give a satisfactory answer to this question. Indeed, so far as the author knows, no one has as yet attempted it. Moreover it is a question for a taxation expert to answer rather than for a student

in school administration. It is important, however, that any answer which may be offered will take into account these considerations which influence the highest efficiency of the local schools.

Principles Relating to State Support

A summary of what has been said thus far may be stated in the form of certain fundamental principles as follows:

1. Local support is fundamental.
2. The local units for the support of schools should contain, in so far as practicable, enough property taxable for school purposes to raise that portion of the expenses of the school which it is believed should be borne by the local districts without an undue burden upon the owners of property.
3. Some portion of the support of local schools should come from the state government, the amount being dependent upon certain factors, exact standards for which have not been scientifically determined, but which will vary in the different states.
4. The administration of state aid should be such as to increase the efficient participation of citizens in a democratic form of government.
5. The purpose of state aid should be not only to protect the state from ignorance, to provide intelligent workers in every field of activity, and to educate leaders, but also to guarantee to each child, irrespective of where he happens to live, equal opportunity to that of any other child for the education which will best fit him for life.

Criteria for Determining Efficiency of State Support

These principles and the considerations upon which they are based warrant certain criteria which may be used to determine the efficiency of any plan of central support of schools. Any scheme of state support should be arranged so as to comply with as many of the following criteria as possible:

1. The efficient participation of citizens in the responsibilities of citizenship should be promoted by making the extent of the state's contribution depend upon the legislative action of the local board.
2. The authority of the central or state office to withhold funds should be fixed in such a way as to promote neither autocratic

control, on the one hand, nor supineness of action, upon the other. This will be gained by requiring that the amounts to be withheld by reason of deficiencies in the local school districts be graded and made dependent upon the extent of the shortcoming and the number of previous delinquencies.

3. The state should encourage by grants the introduction of new features into the schools, especially those which would not ordinarily of their own volition be undertaken by many communities.

4. The districts should receive support in inverse proportion to their true valuations back of each school unit (as a teacher and her school) in order that the equalization of educational opportunity among all the children of the State can be the more easily secured. The point in the scale of equalized valuations per teacher to which this equalization should be carried is to be determined by differences in wealth and in educational interest in the local communities as well as by the amounts of money available and by the compelling necessity of preserving and stimulating democratic control of schools in local communities.

5. Efficiency in conduct of schools should be promoted by increasing the state grants whenever the true tax-rate is increased and by lowering it whenever the local tax is decreased, since these usually reveal increased and decreased efficiency in the qualifications of teachers employed, in courses of study taught, in supplies and equipment furnished and in every other factor that goes to make up a good school.

6. The plan of state aid should be so framed that it will measure precisely the elements involved and will respond promptly and surely to any change in the local districts affecting them.

It should be noted in connection with these criteria that they do not diminish in any way the control which the State legislature has over the schools of any district. On the contrary, their observance will assist in the realization of such standards and practices as may be set up by it or under authority granted by it.

CHAPTER IX

PRESENT SYSTEM OF GENERAL AID IN THE STATE OF NEW YORK

THE present system of state aid for the support of schools in the State of New York may be divided into two divisions: (1) General aid, and (2) Special forms of aid. They will be discussed in order.

The present plan of General Aid in New York had its beginning about 1885 in the establishment of the "teacher quota." In 1898 the "district quota" was combined with it and since that time they have formed the bases for distribution of a very large share of the state support of schools. In the case of both of these quotas there was uniform application throughout the entire State, grants being the same for all teachers irrespective of where they were employed or the salaries paid and for all districts irrespective of whether they were city schools or rural schools. The teacher quota, which came first, favored the larger districts while the district quota favored the smaller districts. Differentiation in the district quotas was made soon after 1900, when larger quotas were given to the poorest districts, the amounts varying somewhat in accordance with their valuation. In 1920 the differentiation in the teacher quotas was introduced, recognizing for the first time differences in the classes of districts and giving also signal recognition to differences in valuations in districts having one teacher. This is known as the "additional teacher quota."

The district quotas (based on the assessed valuations and not the equalized valuations) are as follows:

Assessed valuation	State aid
$20,000 and less	$200
20,001–40,000	175
40,001–60,000	150
Over 60,000	125

The "teacher quota," given to each district in the State having more than one teacher, is $100 for each teacher in addition to the first. The additional teacher quota law passed in 1920, under which grants were made for the first time during the year 1920–21, has quotas varying from $200 to $600.

Under all of these laws combined each of the following districts or classes of districts secures from the State for every teacher approximately the amounts indicated below:

New York City	$700
Buffalo, Rochester, Syracuse, Yonkers, Mount Vernon, New Rochelle, Tonawanda, White Plains	650
Other cities of 50,000 or more	550
Cities of less than 50,000 and villages under superintendents	450
Other union free school districts	450
Other schools employing more than one teacher	400
School districts employing one teacher and having an assessed valuation of $100,000 or more	325
Assessed valuation of 90,000–99,000	355–328
80,000–89,000	385–358
70,000–79,000	415–388
60,000–69,000	470–418
50,000–59,000	500–473
40,000–49,000	555–503
30,000–39,000	585–558
20,000–29,000	640–588
10,000–19,000	670–643
1,000– 9,000	722–673

Criticism of New York Plan of State Support

All Classes of Districts.—In evaluating the New York plan of state school support by the application of the criteria (see p. 117), it will be best first to test it in its general aspects so far as that is possible. From this point of view it may be said that it does not satisfy the first criterion, inasmuch as the amount of aid given is not affected in any way by the quality of schools maintained by the local school board so long as minimum standards are maintained. Second, like most state plans, it is weak in that the State Education Officer is required in almost all grants to withhold the entire grant or none of it. Such officers in all states find it necessary to threaten the withholding of funds because of some shortcoming on the part of a district but do not carry out their threats because of the practical consequences that would come to the district or to the state office by such an act. It would increase the efficiency of

local schools if the State Education Office had the authority to withhold such proportion of any grant as the gravity of the shortcoming and the number of previous delinquencies, if any, justified. The third criterion applies mostly to the forms of Special Aid which will be treated later. The sixth criterion is not adequately complied with as will be shown in part in the next section as far as precision of measurement is concerned. Coming now to the fourth and fifth criteria it will promote clearness if we treat the various classes of districts separately.

Common School Districts.—In allowing to common school districts three dollars for every thousand dollars of assessed valuation of less than $100,000 the State gives partial recognition to the fourth criterion. However, the equalization plan is faulty from this point of view in at least two respects. The point at which the attempted equalization ceases causes it to cover only about one-half of the common school districts; in other words, the point is not high enough. Viewing all the schools of New York from the standpoint of the State it may be said to be composed of as many fundamental units of organization as there are teachers. Distributing the 54,420 teachers in the State among the various school units only about 10,500 are found in the common school districts and about 7,500 of them in the union free school districts, or a total of 18,000 in the so-called rural schools together, almost exactly one-third of the total number. Now, when it is remembered that the median equalized valuations back of each teacher in the common and union free school districts is about $108,000 while in the cities and villages it is about $183,000, approximately seventy-five percent more, it follows that the median amount of wealth behind each teacher for the entire State must be considerably larger. It would seem, therefore, that in order to put the rural school district as a whole upon a more nearly equal plane with the city districts the point of equalization should be placed much higher than it now is. At just what point it should be placed will be considered in the next chapter dealing with the proposed revised form of state aid.

This criterion is also violated in that the plan does not equalize the cost burden among the districts having valuations of less than $100,000. The salary for a teacher for the minimum term of 36

weeks at $20 a week is $720. Assuming that the other expenses of the school equal one-fourth of the teacher's salary and excluding altogether necessary outlays, $900 is a reasonable amount for a school of the lowest grades to spend. Thus a district of $10,000 valuation receiving $670 from the State would have to raise $230 locally in order to have a minimum standard school. This is equivalent to a tax of 23 mills. On the other hand, a district having an assessed valuation of $60,000 would find it necessary to levy only approximately the tax of seven mills, while a district of $100,000 would have to levy a tax of only five and three-quarters mills. Thus the lower valuation districts are at a very great disadvantage.

Applying now the fifth criterion, it may be seen by reference to Table 36 in Chapter VI that the tax-rates for varying valuations have a wide range. If the reader will turn back to this table and imagine the substitution in the left-hand column of the grants from the State given above in lieu of the corresponding valuations he will readily conclude that the plan fails in a considerable degree to give to districts in proportion to the efforts made by them to support schools.

In a further study upon this point a correlation table showing the relationship between the amounts of total expenses per teacher and the grants made by the State has been prepared for all the districts having a one-teacher school in the first supervisory districts of Delaware, Monroe and Tompkins Counties as is given herewith in Table 38. It presents in a striking way the fact that those districts which spend the least amount of money are given the most, while those that spend the largest amounts are given the least. The coefficient of correlation according to Pearson is —.83, which indicates high inverse correspondence. This is to be accounted for by what has been shown above; namely, that the low valuation districts cannot have the minimum amount required to run a school without an excessive tax. The plan of state support fails entirely to take into account any effort which a district makes to maintain a proper school. The district which gives good support receives no more than one which neglects its responsibilities. The plan thus promotes a tendency among rural districts to maintain cheap schools. Another effect of the plan as thus constituted is to establish the

habit in these lower valuation districts of looking upon the State as the almoner of the district and thus to weaken the sense of self-responsibility. In case the plan were so reorganized as to give districts

TABLE 38.—RELATIONSHIP BETWEEN AMOUNT OF TOTAL EXPENSE PER TEACHER AND THE GRANTS MADE BY THE STATE IN ACCORDANCE WITH THE EQUALIZED VALUATION PER TEACHER IN THE FIRST SUPERVISORY DISTRICT OF DELAWARE, MONROE AND TOMPKINS COUNTIES RESPECTIVELY

Amount of total expenses per teacher	State grants and equalized valuation											Total
	$325 $100,000	$355 $90,000	$385 $80,000	$415 $70,000	$470 $60,000	$500 $50,000	$555 $40,000	$585 $30,000	$640 $20,000	$670 $10,000	$700 $9,999	
$1,400	..	..	..	..	..	..	2	..	..	..	..	2
1,350	1	..	..	..	..	..	..	..	..	..	..	1
1,300	..	..	..	..	..	..	..	..	..	..	..	..
1,250	1	..	..	..	..	..	..	..	..	..	..	1
1,200	..	..	..	..	..	..	..	..	..	..	..	..
1,150	2	..	..	..	..		..	..	..	..	..	2
1,100	3	..	..	..	..		..	..	..	..	..	3
1,050	1	..	..	..	..		..	..	..	..	..	1
1,000	3	..	1	..	1	Median	..	..	..	..	..	5
950	6	..	..	..	..		..	..	1	..	..	7
900	9	..	1	1	..	1	1	..	1	..	..	14
850	2	1	..	..	1	..	..	1	..	..	..	5
800	3	..	1	..	2	Median		..	2	..	..	8
750	1	..	2	1	2	2	2	3	1	2	2	18
700	..	..	1	..	..	1	4	3	2	4	1	16
650	..	..	..	..	1	..	1	2	3	7	..	14
600	..	..	..	..	..	2	..	2	3	3	..	10
550	..	..	..	..	..	..	..	..	1	..	..	1
500	..	..	..	..	..	..	..	..	..	..	..	..
Total.....	32	1	6	2	7	6	8	13	14	16	3	108

Median equalized valuation per teacher..... $50,000
Median amount of total expenses per teacher..... $787

in proportion to their local tax-rate as well as in proportion to their deficiencies in valuation, these unfortunate results could be avoided. Such a modified plan is suggested in the next chapter, Chapter X.

Union Free School Districts.—All union free school districts receive under the state plan of support the same amount per teacher. Pursuing the same method of criticism just outlined for common

Table 39.—Equalized Valuation and Equalized Tax-Tates for 34 Union Free School Districts

Equalized valuations in thousands	Equalized tax-rates																			Total
	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
$30	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1
40	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1
50	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2
60	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1
70	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2
80	..	..	..	..	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	3
90	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2
100	..	..	..	1	..	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..	5
110	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
120	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
130	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	3
140	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
150	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
160	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
170	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
180	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
190	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
200	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
210	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
220	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
230	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
240	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
250	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
260	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
270	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
280	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
290	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Totals	1	1	2	6	3	4	2	2	4	3	3	..	1	..	..	..	..	..	..	..	32

school districts and using the facts presented in Table 39 relative to equalized valuations and tax-rates, it is clear that both the fourth

and fifth criteria are not observed. In fact the plight of the union free school districts having an assessed valuation below $90,000 per teacher is worse than that of the common school districts.

Villages and Cities.—An absolute disregard of the very important and essential facts regarding both valuations and tax-rates

Table 40.—Equalized Valuation Per Teacher and Equalized Tax-Rates in Cities Receiving $450 State Aid

Equalized valuations in thousands	Equalized tax-rates									Total
	4	5	6	7	8	9	10	11	12	
$90	..	..	..	..	..	..	..	..	1	1
100	..	..	1	..	1	..	..	..	..	2
110	..	..	1	..	..	..	1	..	..	2
120	..	..	..	..	..	..	2	1	..	3
130	..	..	..	1	1	..	..	..	..	2
140	..	..	..	..	1	..	..	..	..	1
150	..	..	..	4	1	1	1	1	..	8
160	..	..	..	..	..	2	..	1	..	3
170	..	..	..	1	1	1	2	..	..	5
180	..	..	..	1	2	1	..	..	..	4
190	..	..	..	..	..	..	..	..	..	..
200	..	..	2	1	..	..	..	..	..	3
210	..	..	1	..	..	..	..	..	..	1
220	..	..	..	..	..	1	..	..	..	1
230	..	1	..	..	..	..	..	..	..	1
240	..	1	1	..	1	..	..	..	..	3
250	1	..	..	..	..	..	..	..	..	1
260	..	..	1	..	..	..	..	..	..	1
270	..	1	..	..	..	..	..	..	..	1
340	..	..	1	..	..	..	..	..	..	1
Total.....	1	3	8	8	8	6	6	3	1	44

is manifest in the present plan of state support to villages and cities. Certain of these villages and cities, as is shown in Tables 40 and 41 for villages and 42 and 43 for cities, are in great need of aid from the State because of their low valuations and high tax-rates, while, on the

other hand, others who receive just as high grants are fully able to take care of themselves.

Operation of Present Law in Cities and Villages.—It is evident that in order for needy and worthy districts to receive aid,

Table 41.—Equalized Valuation Per Teacher and Equalized Tax-Rates in Villages Receiving $450 State Aid

Equalized valuation in thousands	Equalized tax-rates										Total
	5	6	7	8	9	10	11	12	13	14	
$100	..	..	..	..	..	..	..	..	..	1	1
110	..	..	..	..	..	..	2	..	1	..	3
120	..	..	1	..	..	..	..	..	..	..	1
130	..	..	..	2	1	1	..	..	..	..	4
140	..	1	..	..	1	1	..	..	1	..	4
150	..	..	2	1	1	..	..	..	..	..	4
160	..	1	1	..	..	..	..	..	..	..	2
170	..	1	1	..	..	..	..	..	..	..	2
180	..	1	1	1	..	..	..	..	..	..	3
190	..	..	2	..	..	..	..	..	..	..	2
200	..	..	..	1	..	..	..	..	..	..	1
210	..	..	..	..	..	..	..	..	..	..	..
220	..	2	..	1	..	..	..	..	..	..	3
230	..	1	..	..	1	..	..	..	..	..	2
240	..	..	..	..	..	..	..	..	..	..	..
250	1	1	..	..	..	..	..	..	..	..	2
260	..	..	..	..	..	..	..	..	..	..	..
270	..	..	1	..	..	..	..	..	..	..	1
280	..	1	..	..	..	..	..	..	..	..	1
300	1	..	..	..	..	..	..	..	..	..	1
320	..	1	..	2	..	..	..	..	..	..	3
380	1	..	..	..	..	..	..	..	..	..	1
Total.....	3	10	9	8	4	2	2	..	2	1	41

those districts which are wealthier must contribute to the State more than they get back from it. It seems desirable in view of the facts revealed in Tables 40–43 to make a study of cities from this point of view based upon amounts paid to the State through the mill

and a half school tax. It is well to point out, too, that a misunderstanding has existed among citizens generally in making such comparisons due to the fact that it is assumed that the total amount coming from the State in the form of district and teacher grants was

TABLE 42.—RELATIONSHIP BETWEEN EQUALIZED VALUATION AND EQUALIZED TAX-RATE FOR CITIES RECEIVING $550

Equalized valuations in thousands	Equalized tax-rates					Total
	5	6	7	8	9	
$170	..	..	..	×	..	1
180	..	..	..	..	..	..
190	..	..	..	..	..	..
200	..	..	..	..	..	..
210	..	..	..	..	..	..
220	..	..	..	..	..	..
230	..	..	..	..	..	..
240	..	×	..	..	..	1
250	×	..	..	..	..	1
260	..	..	×	..	..	1
270	..	..	..	..	..	..
280	..	..	..	..	..	..
290	..	×	..	×	..	2
300	..	..	..	..	..	..
310	..	..	..	..	×	1
320	..	..	..	..	..	..
330	..	..	×	..	..	1
340	..	..	..	..	..	..
350	..	..	..	..	..	..
360	..	..	..	..	..	..
370	..	..	..	..	..	..
380	..	..	..	..	..	..
390	..	..	..	..	..	..
Total.....	1	2	2	2	1	8

derived from this school tax. As a matter of fact, only 61.7 percent has come from this source, the difference being made up by the income received by the State from other sources. In making the comparison, therefore, between the amounts paid in on this tax and

the amount received from state aid it was necessary to take only 61.7 percent of the receipts from public money. These amounts were set over against the amounts paid by the respective cities on account of the tax.

TABLE 43.—RELATIONSHIP BETWEEN EQUALIZED VALUATIONS AND EQUALIZED TAX-RATE FOR CITIES RECEIVING $650 STATE AID

Equalized valuations in thousands	Equalized tax-rates							Total
	2	3	4	5	6	7	8	
$170	..	..	..	..	..	..	×	1
180	..	..	..	..	..	..	..	..
190	..	..	..	..	..	×	..	1
200	..	..	..	..	..	..	..	..
210	..	..	..	×	..	..	..	1
220	..	..	..	..	..	..	..	..
230	..	..	..	..	..	×	..	1
240	..	..	..	..	..	..	..	..
250	..	..	..	..	..	..	..	..
260	..	..	..	..	..	..	..	..
270	..	..	..	..	..	..	..	..
280	..	..	..	..	..	..	..	..
290	..	..	..	..	..	..	..	..
300	..	..	..	..	..	..	..	..
310	×	..	..	..	..	..	..	1
320	..	..	..	..	..	..	..	..
330	..	..	..	..	..	..	..	..
340	..	..	..	..	..	..	..	..
350	..	..	..	..	..	..	..	..
360	..	..	..	..	..	..	..	..
370	..	..	×	..	..	..	..	1
380	..	..	..	..	..	..	..	..
390	..	..	..	..	..	..	..	..
400 and over[1]	..	..	..	×	..	..	..	1
Total.....	1	..	1	1	..	3	1	7

[1] New York, $700.

The differences were found to be both upon the plus and minus sides, certain cities paying the State more than they received in return, other cities receiving more than they paid. The results of the study are brought together in Table 44, which allocates each of the

TABLE 44.—EQUALIZED TAX-RATE AND THE AMOUNT OF MONEY RECEIVED BY CITIES FROM THE STATE MORE OR LESS ON THE BASIS OF THE AMOUNT CONTRIBUTED BY THEM

Amount received from State	Equalized tax-rate									Total
	2	3	4	5	6	7	8	9	10	
$— 200	..	..	1	..	..	..	..	..	..	1
— 190	..	..	..	..	..	..	..	..	..	..
— 180	..	..	..	..	..	..	..	..	..	..
— 170	..	..	..	..	..	..	..	..	..	..
— 160	..	..	..	1	..	..	..	..	..	1
— 150	..	..	..	..	..	..	..	..	..	..
— 140	..	..	..	..	..	..	..	..	..	..
— 130	..	..	..	..	..	..	..	..	..	..
— 120	1	..	..	..	..	..	..	..	..	1
— 110	..	..	..	..	..	..	..	..	..	..
— 100	..	..	..	..	..	..	..	..	..	..
— 90	..	..	..	..	..	..	..	..	..	..
— 80	..	..	..	..	..	1	1	..	..	2
— 70	..	..	..	1	..	..	..	..	..	1
— 60	..	..	..	1	..	..	..	1	..	2
— 50	..	..	..	..	..	..	..	1	..	1
— 40	..	..	..	..	..	2	..	..	..	2
— 30	..	..	..	..	..	..	..	..	..	..
— 20	..	..	..	1	1	..	1	..	..	3
— 10	..	..	..	..	..	..	..	..	..	..
0	..	..	..	..	1	1	1	..	..	3
+ 10	..	..	..	1	..	..	1	..	1	3
+ 20	..	..	..	..	1	..	..	..	..	1
+ 30	..	..	..	..	..	..	..	..	1	1
+ 40	..	..	..	..	..	..	1	..	..	1
+ 50	..	..	..	..	..	2	..	..	..	2
+ 60	..	..	..	..	..	..	2	..	..	2
+ 70	..	..	..	..	..	1	..	..	..	1
+ 80	..	..	..	..	..	..	..	..	..	..
+ 90	..	..	..	..	..	..	..	..	..	..
+ 100	..	..	..	..	..	..	..	..	..	..
+ 110	..	..	..	..	..	..	..	..	..	..
+ 120	..	..	..	..	..	..	..	..	..	..
+ 130	..	..	..	..	..	..	..	..	..	..
+ 140–149	..	..	..	..	..	..	..	..	1	1
Total	1	..	1	5	3	7	7	2	3	29

various cities as to the number of dollars per teacher that they received from the State, more or less, than they paid in. Those receiving more from the State are indicated by the plus sign and are shown in the lower half of the table; those receiving less are found in the upper half. They are distributed in the various columns according to the equalized tax-rates. Thus it will be seen that although cities with the highest tax-rates more frequently receive more than they pay in, nevertheless there are many instances of cities with the same tax-rate, some of which are in the upper group and others in the lower. This is not in accordance with sound principles of state school support as set forth in the criteria given above. The law at present takes account of neither the district's ability nor the effort which it puts forth to support schools.

Plans For Apportionment of School Money in Certain Other States

The fundamental part of the method of the apportionment of state support of schools in New York State belongs to that group of states which emphasize the "teacher basis." There are several variations of this type all of which are improvements upon the original form, namely, that of giving the same amount for every teacher in the state. California and New Hampshire have defined a teacher in terms of average daily attendance and thus combined the teacher and attendance bases in a single form. New Jersey and Massachusetts have established varying amounts of money for varying types of positions—the more important positions and those requiring higher qualifications receiving the larger grants. New York combines in a peculiar way with its "teacher basis" the condition that the recognition of property valuations be taken into account. The Massachusetts plan differs from it in that the unit for measuring the differences among the various districts is the valuation per pupil rather than the valuation per teacher as in New York State. The Massachusetts plan is like that of New York in that the differentiations are made only in the case of the lower valuation districts.

A careful study of these plans, which are among the best plans in the United States, reveals the fact that certain of them, on the one hand, stimulate local districts to employ superior teachers and to

maintain good attendance for longer terms and that, on the other hand, certain other states endeavor to lighten the financial burden of the poorer districts. None of them, however, except that of Massachusetts, combines both of these objects in a single unified plan. For this reason it should receive careful consideration.

State aid in Massachusetts is divided into two parts: Part I provides that either $100, $150, or $200 shall be given for each teacher, principal, supervisor, or superintendent in every city or town, the amounts varying with professional training or experience. These amounts are increased in those towns having assessed valuations of less then $4,500 per pupil based on the net average membership of the day schools. These increased grants range from $50 per teacher or officer in towns having a valuation per pupil of $4,000 but less than $4,500 to $350 in those towns that have a valuation per pupil of less than $2,000.

Part II makes still further grants to those towns having a valuation of less than $2,500,000 (without regard to number of teachers), which in order to conduct their schools are compelled to levy a tax of over 5 mills. The amount paid is based upon the difference between the total expenses of the schools (subject to certain deductions above maximum standards of salaries and expenses per teacher) and the amount received from the State under Part I. These additional grants range from one-half the difference between the expenses and the previous state grant to one-half the difference less the proceeds of a 5 mill tax.

While this is not the proper place in which to discuss this plan in detail, it deserves consideration as one which seeks to combine in one unified plan those features necessary to satisfy the criteria which have been set up earlier in this chapter. In differentiating between the districts on the basis of attendance for educational grants and in going so far as to match dollar for dollar with the district when these grants are not sufficient, it stimulates the various local communities to provide better schools. The plan is to be commended in that it places a maximum limit for expenditures, and attempts to equalize the educational burden among the various towns.

Its weaknesses are twofold: (1) The grants have not been worked out with careful precision. The differences in the salaries

paid different classes of teachers do not represent the differences in actual costs in any of the districts. The differences in the educational grants ranging from $100 to $350 are not in proportion to the differences in the tax-rates necessary to maintain efficient schools in the districts with the valuations named. (2) In its efforts to meet deficiencies it does not place the various districts on the same equality to the degree that is desirable. It uses the pupil rather than the teacher as the valuation unit and thus fails to secure as precise an adjustment with actual costs. Other objections to it are its complexity and the difficulty that it seems districts might have in estimating the amounts of money to be received from the State, which should in turn make it difficult to properly prepare the budget.

This system of state aid recognizes most closely the principle recommended in the study. In its details it differs widely from those recommended herewith, as will be seen from the reading of the following chapter.

CHAPTER X

THE PROPOSED PLAN FOR APPORTIONMENT OF GENERAL AID

THE point has now been reached when it is necessary to outline a system of state subsidies for aid of local schools that will satisfy the principles and criteria set forth in Chapter VIII. It is divided into two parts—General Aid and Special Aid. The former is presented in this chapter, and the latter in Chapter XI. While both parts are in accordance with the body of principles and criteria, as a whole, General Aid satisfies more particularly the fourth and fifth, and Special Aid, the third criterion.

Four different forms of General Aid are offered, designated as Forms I, II, III and IV. Each is a variant of a single scheme which recognizes both the ability and effort of the various school districts to support schools. Form I is fundamental, while the other three are modifications of it, made either to improve it, as in the case of Form II, or to meet the present legal limitations placed upon the tax-rates of certain cities in the State, as in Forms III and IV. Form IV differs from Form III in much the same way as Form II differs from Form I. Tables are given to show exactly how much any district in the State would receive under the operation of Forms I, II, and III. The table for Form IV can be so easily produced from the tables for Forms II and III that it does not seem necessary to take the space to present it here.

Form I

An understanding of Form I is necessary to the comprehension of the other forms. Table 45 shows the amount of General Aid that would be given per teacher to districts under Form I when the equalized or true millage and the equalized or true valuation of the taxable property back of each teacher are known.

TABLE 45.—AMOUNTS OF STATE AID DISTRICTS OF VARYING EQUALIZED VALUATIONS BACK OF EACH TEACHER WILL RECEIVE FOR EACH TEACHER UNDER FORM I FOR EACH MILL LEVIED, AND AMOUNTS OF LOCAL SUPPORT REQUIRED

Amount to be spent per teacher for current expenses	$840		$960		$1,080		$1,200		$1,320		$1,440		$1,565		$1,680		$1,800		$1,920		$2,040		$2,160	
Mills necessary to levy	3½ mill tax		4 mill tax		4½ mill tax		5 mill tax		5½ mill tax		6 mill tax		6½ mill tax		7 mill tax		7½ mill tax		8 mill tax		8½ mill tax		9 mill tax	
Equalized valuations per teacher	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid
$5,000	18	822	20	940	23	1058	25	1175	28	1292	30	1410	33	1527	35	1645	38	1762	40	1880	43	1997	45	2115
15,000	53	787	60	900	68	1013	75	1125	83	1237	90	1350	98	1462	105	1575	113	1687	120	1800	128	1912	135	2025
25,000	88	752	100	860	113	968	125	1075	138	1182	150	1290	163	1397	175	1505	188	1612	200	1720	213	1827	225	1935
35,000	123	717	140	820	158	923	175	1025	193	1127	210	1230	228	1332	245	1435	263	1537	280	1640	298	1742	315	1845
45,000	158	682	180	780	203	878	225	975	248	1072	270	1170	293	1267	315	1365	338	1462	360	1560	383	1657	405	1755
55,000	193	647	220	740	248	833	275	925	303	1017	330	1110	358	1202	385	1295	413	1387	440	1480	468	1572	495	1665
65,000	228	612	260	700	293	788	325	875	358	962	390	1050	423	1137	455	1225	488	1312	520	1400	553	1487	585	1575
75,000	263	577	300	660	338	743	375	825	413	907	450	990	488	1072	525	1155	563	1237	600	1320	638	1402	675	1485
85,000	298	542	340	620	383	698	425	775	468	852	510	930	553	1007	595	1085	638	1162	680	1240	723	1317	765	1395
95,000	338	507	380	580	428	653	475	725	523	797	570	870	618	942	665	1015	713	1087	760	1160	808	1232	855	1305
105,000	368	472	420	540	473	608	525	675	578	742	630	810	683	877	735	945	788	1012	840	1080	893	1147	945	1215
115,000	403	437	460	500	518	563	575	625	633	687	690	750	748	812	805	875	863	937	920	1000	978	1062	1035	1125
125,000	438	402	500	460	563	518	625	575	688	632	750	690	813	747	875	805	938	862	1000	920	1063	977	1125	1035
135,000	473	367	540	420	608	473	675	525	743	577	810	630	878	682	945	735	1013	787	1080	840	1148	892	1215	945
145,000	508	332	580	380	653	428	725	475	798	522	870	570	943	617	1015	665	1088	712	1160	760	1233	807	1305	855
155,000	543	297	620	340	698	383	775	425	853	467	930	510	1008	552	1085	595	1163	637	1240	680	1318	722	1395	765
165,000	578	262	660	300	743	338	825	375	908	412	990	450	1073	487	1155	525	1238	562	1320	600	1403	637	1485	675
175,000	613	227	700	260	788	293	875	325	963	357	1050	390	1138	422	1225	455	1313	487	1400	520	1488	552	1575	585
185,000	648	192	740	220	833	248	925	275	1018	302	1110	330	1203	357	1295	385	1388	412	1480	440	1573	467	1665	495
195,000	683	157	780	180	878	203	975	225	1073	247	1170	270	1268	292	1365	315	1463	337	1560	360	1658	382	1755	405

205,000	718	122	820	140	923	158	1025	175	1128	192	1230	210	1333	227	1435	245	1538	262	1640	280	1743	297	1845	315
215,000	753	87	860	100	968	113	1075	125	1183	137	1290	150	1398	162	1505	175	1613	187	1720	200	1828	212	1935	225
225,000	788	52	900	60	1013	68	1125	75	1238	82	1350	90	1463	97	1575	105	1688	112	1800	120	1913	127	2025	135
235,000	823	17	940	20	1058	23	1175	25	1293	27	1410	30	1528	32	1645	35	1763	37	1880	40	1998	42	2115	45
245,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
255,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
265,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
275,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
285,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
295,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	56	..	60	..	64	..	68	..	72
305,000	..	24.5	..	28	..	31.5	..	35	..	38.5	..	42	..	45.5	..	49	..	52.5	..	56	..	59.5	..	62
355,000	..	24.5	..	28	..	31.5	..	35	..	38.5	..	42	..	45.5	..	49	..	52.5	..	56	..	59.5	..	62
405,000	..	21	..	24	..	27	..	30	..	33	..	36	..	39	..	42	..	45	..	48	..	51	..	54
455,000	..	21	..	24	..	27	..	30	..	33	..	36	..	39	..	42	..	45	..	48	..	51	..	54
505,000	..	17.5	..	20	..	22.5	..	25	..	27.5	..	30	..	32.5	..	35	..	37.5	..	40	..	42.5	..	45
605,000	..	14	..	16	..	18	..	20	..	22	..	24	..	26	..	28	..	30	..	32	..	34	..	36
705,000	..	10.5	..	12	..	13.5	..	15	..	16.5	..	18	..	19.5	..	21	..	22.5	..	24	..	25.5	..	27
805,000	..	7	..	8	..	9	..	10	..	11	..	12	..	13	..	14	..	15	..	16	..	17	..	18
905,000	..	3.5	..	4	..	4.5	..	5	..	5.5	..	6	..	6.5	..	7	..	7.5	..	8	..	8.5	..	9

The proceeds of the local tax for each of the various millages and valuations are also given for the districts having equalized valuation less than $240,000. In each case the sum of the local tax and the General Aid amounts to the number of dollars given at the head of the column for the millage levied. One reason for placing the dollar figures at the top of the columns in this way is to facilitate the use of the table by local school directors in determining the local tax-rate. The directions for this procedure will be given later. Another reason for this arrangement is that it helps to make clearer the nature of the plan.

The two parts of this table were derived from two different types of considerations. Those governing the part concerning valuations of less than $240,000 per teacher will be set forth first.

First Part of Form I.—General Aid seeks to give aid to local school districts in accordance with a combination of two factors, one of which is the ability of the

district to support schools as measured by its equalized valuation per teacher (the fourth criterion) and the other, the effort which the district makes to support a school as measured by its tax-rate (the fifth criterion).[1]

In the case of the former factor the grants from the State are in inverse proportion to the ability of the district to support schools, *i. e.*, those having the least wealth receiving most and those having the greatest wealth receiving least. In the case of the latter factor each increase in tax-rate brings an increased grant from the State and each decrease, its corresponding diminution. In accordance with the first and sixth criteria of the theory of state aid proposed in Chapter VIII, the amount of General Aid granted by the State according to this plan changes with each alteration in wealth or tax-rate and the extent of such changes corresponds to the alterations made within and by the local districts.

This plan satisfies the need of the State, placing districts as nearly upon an equality as possible in regard to local support of schools, so that all districts making the same effort, which means levying the same tax-rate, may have the same amount of money with which to support their schools. A moment's reflection will show, however, that all districts in the State cannot be included in a plan placing all districts upon such an equality. Take two districts, one with $1,000,000 taxable wealth back of each teacher, another with $20,000, and suppose that $2,000 represents the amount that each should have to support a school for each teacher employed. The wealthier district could raise the $2,000 by a local tax of two mills; the poorer district, on the other hand, would have to levy a tax of 100 mills. In the first case the local tax is far below the normal, while the second case presents an impossible situation. The former district can properly be excluded on practical grounds from any system of aid which attempts to produce an equality in ability to support schools on the ground that it already raises sufficient money by itself to support a superior school with less than the normal tax-rate. But looking at the question from the point of view of the poorer district, is it not right that the State should place it financially on the same plane as the wealthier one? In order to

[1] See page 117.

place both on an equality the State would be required to give the poor district for each teacher at least the difference between $2,000 and the proceeds of a two mill tax on $20,000 or $1,960. Should the rich district be given a subsidy, the grant to the poor district would have to be increased proportionately. The granting of such a large proportion of State aid to districts which vote a tax of but two mills would practically mean the abandonment of local taxation and thus affect indirectly the democratic government of schools. This would violate the fourth principle governing school support and should not be permitted. The sound policy would be to grant aid only to those local districts that had first made a reasonable effort to support schools. Furthermore, with such large grants as this upon so little local effort the operation of the second factor in the plan—the increasing and decreasing of State aid with increases and decreases of local tax—would have to operate upon such a low scale that its results would be far from satisfactory in promoting efficient schools.

Thus choice must be made between two alternatives, viz.—(1) excluding the richer districts from the operation of the principle of equalization of support and preserving local taxation as the fundamental element of school support, or (2) securing reasonably close equality as regards support among all districts, but with the sacrifices of two of the most fundamental elements of our government and of American life itself—local taxation and democratic control.

It is obvious that the former line of action is the one to follow since it can be pursued without injury to the richer districts. While it is possible and even probable that schools might be benefited in the beginning by the second alternative, the harmful effects upon society would eventually react upon the schools and work against the realization of one of their most fundamental aims—the preservation and development of a sound democracy.

Standards.—It is evident, from the consideration of these facts, that in order to formulate the details of any plan for state subsidies based upon ability and effort, it is necessary that in the beginning certain standards be settled upon—(1) as to the cost per teacher of conducting the school, or Standard Cost per Teacher, (2)

as to the tax-rate that a local district should levy in order to secure from the State such a grant as would permit it to have sufficient funds from both local and state sources to meet the standard cost per teacher. This may be called the Standard Tax-Rate, and (3) as to how high in the range of equalized valuations the plan should extend, which point may be called the Maximum Valuation per Teacher Standard. General Aid as presented in Forms I, II, III and IV is so planned as to make it possible for all districts having valuations below the maximum valuation standard which levy the same local tax-rate, to have from both local and state sources the same amounts of money to spend for schools, irrespective of what this valuation may be.

The starting-point in the preparation of the plan presented in Table 45 was the Standard Cost per Teacher and the Standard Tax-rate. Any district levying the standard tax-rate should have, it was thought, sufficient funds from the State to have in its possession from both local and state sources sufficient money to meet the Standard Cost per Teacher. The Maximum Equalized Valuation Standard was placed at that point in the scale of equalized valuation furnished in Table 29, where, in the process of equalization, the wealthier local districts, because of their high valuations, ceased to need any state money to meet the Standard Cost per Teacher after levying the Standard Tax-Rate.

Such were the relationships of these three standards to each other as they were finally fixed by the author. But before a definite decision was reached various other relationships between them were considered. Closely interwoven with this phase of the subject is that of the standards themselves. In fact, these two aspects of the question are so closely interrelated that they cannot be separated. Certain possible standards that might have been adopted, most of which are taken from previous chapters, are given in Table 45a.

Many tables for state aid were constructed with these different figures as possible standards in varying relationships to each other and the plans thus formulated were tested out as to their practical operation in various typical districts. Several interesting and significant decisions were reached upon the basis of this experience:

First. Standards should be derived from data for the State as a

whole rather than from rural or city schools alone. This seems fair from the theoretical point of view, since the State should not discriminate between classes of districts except as the local districts

TABLE 45A.—POSSIBLE STANDARDS IN CONSTRUCTING THE ABILITY AND EFFORT PLAN FOR GENERAL AID

	Valuation per teacher	Tax-rate mills	Expenses per teacher
MEDIANS			
Entire State (estimates)	$290,000	5.8	..
Excluding N. Y. City (estimates)	169,000	7.2	..
Common Sch. Dists. (estimates)	107,000	5.4	$786 (1 rm. sch.)
Union Free Sch. Dists. (estimates)	107,727	8.9	1,217
Villages under Supt. (estimates)	181,666	7.8	1,533
Cities	183,750	8.2	1,540
AVERAGES			
Entire State	240,000	7.2	1,725
Omitting N. Y. City	157,000	8.8	1,380
N. Y. City	347,000 [1]	6.2	2,174
All other cities	..	..	1,770
Villages	..	..	1,538
Towns	..	..	1,086

	Average expense per teacher to local districts	State aid per teacher	Percent state aid is of total
Entire State	$1,135	$590	34
New York City	1,455	719	33
All other cities	1,184	586	33
Villages	1,000	558	36
Towns	669	417	38.5

Average tax-rate upon expenses less state aid for entire State—4.77

[1] Based on equalization table of State Tax Commissioner for 1920—Bronx, Kings, New York, Queens and Richmond Counties combined. There is a disagreement among various sources. The figures $403,000 given in the chapter on valuations was obtained from the assessed valuations furnished by the State Department of Education, multiplied by the rate of equalization given by the State Tax Commission Report for 1919. The *Survey* is unable to determine what is the correct figure.

by their own actions warrant such discrimination. The testing out of the table also showed this to be the wisest plan. Standards furnished by rural schools alone did not give them sufficient aid to become efficient schools; while the standards furnished in the data for the city schools were obviously too high.

Second. The averages are better standards than the medians. This grows out of the fact that the theory of distribution of state funds seeks to insure an equality among all districts. Under such circumstances the distance of every unit from the mean accepted as the standard must be given its true weight. This condition is not fulfilled if the median is used, as is well known by students of statistics and as was fully demonstrated in the trials with the medians as standards.

Third. The maximum equalized valuation standard should be fixed after the other two are known. It was found that any effort to place this standard at any other point than that where state aid ceased to be needed for securing the standard cost through the levying of the standard local tax-rate would produce irregularities among the districts within the range where equality was desired.

Fourth. Another conclusion grows out of the three just stated, namely, that all three standards may best be obtained from the same set of figures—those of the State—and that they should be factors or multiples of one another.

The standards recommended for New York State and the methods by which they were obtained are as follows: (1) The Maximum Equalized Valuation per Teacher Standard—$240,000—was obtained by dividing $12,989,433,732, the total equalized valuation of the State in 1919, upon which the local taxes for the support of schools for 1920 were based, by 54,253 (teaching positions), the number of teachers in the schools of the State in the year 1920. This gives $239,425, or $240,000, the adopted standard. (2) The Standard Cost per Teacher—$1,725—was obtained by dividing $93,585,462, the total expenses of the schools for the entire State, by the number of teachers. (3) The Standard Tax-rate—7.2 mills—was obtained by dividing the total expenses for 1920 by the equalized valuation.

The figures given in Table 45 approximate closely these standards. Accompanying the seven mill tax is a total cost per teacher

of $1,680, while corresponding to the seven and one-half mill tax is a cost of $1,800. Any district having an equalized valuation per teacher of less than $240,000 may have as much money with which to support a school as any other district levying the same tax, inasmuch as the differences in income from local taxes are made up by the State.

Formula for First Part of Form I.—The method of obtaining the amount of state aid given any local school district in this first or upper part of Table 45 may be expressed by the formula—

$$(240 - V)\ M \times T \times \$1\ ^{1}$$

The explanations of the terms of the formula are as follows:

240 is the number of thousands of dollars in the Maximum Equalized Valuation Standard.

V represents the number of *thousands* of dollars in the equalized valuation per teacher of the district in question.[2]

M represents the number of mills (expressed as a whole number) in the equalized tax for school expenses (not including tax for capital outlays, or new buildings, etc.) of the district in question.[2]

T represents the number of full time teachers (including all instruction officers) in the district in question. (In Table 45 all calculations are for one teacher.)

[1] The formula recommended for General Aid to the Joint Committee on Rural Schools (see Rural School Survey of New York State, a Report to the Rural School Patrons, p. 248), in December, 1921—$(290-V) \times M \times T \times .626$—was based on $290,000, the median valuation per teacher for the entire State, 5.8 mills the median tax for the State, and $1,054, the standard cost per teacher in elementary schools of common school districts and union free school districts. This combination of standards does not approach, however, as close an equalization as that suggested above.

While this formula permits the lowest valuation district to have a standard cost per teacher by levying a standard tax-rate, it does not do as much for the lower valuation districts as Form I. It is not possible for them, under this plan, to have as much money available with any mill tax and with the state aid corresponding thereto as the wealthier districts levying the same tax. For this reason this plan is not considered as good as Form I, which, of the four presented in this study, it most closely resembles. Districts having a valuation of less than $155,000 receive less under it than under Form I, while those having a greater valuation receive more.

[2] In Case V is expressed in number of *dollars* the Maximum Equalized Valuation Standard must be expressed as $240,000 and M as a fraction of a dollar, such as .007 for seven mills or .0075 for seven and a half mills.

Second Part of Form I.—It will be recalled that the Maximum Equalized Valuation Standard for aid to local districts under the first part of Form I is placed at $240,000 because that was the point where the necessity for state aid disappeared. Why then give anything to the districts above this standard? The answer is that it is good administrative policy for a State to give every district something, even though the amounts be nominal. The amounts recommended for New York State are as follows:

Districts having a true valuation from—

$232,000–$300,000	shall	receive	$8	for	each	mill	levied
300,000– 399,000	"	"	7	"	"	"	"
400,000– 499,000	"	"	6	"	"	"	"
500,000– 599,000	"	"	5	"	"	"	"
600,000– 699,000	"	"	4	"	"	"	"
700,000– 799,000	"	"	3	"	"	"	"
800,000– 899,000	"	"	2	"	"	"	"
900,000 and over	"	"	1	"	"	"	"

Two questions may properly arise: First. Why should a few districts below $240,000 ($232,000 and over) receive aid according to this plan? Rightfully, they should receive more than districts having a valuation of $240,000 or over; under the plan adopted for the first part of Form I they would receive less. The table places them upon the same footing as districts of $240,000 to $299,000.

Second. Why should $8.00 be granted for each mill levied? By referring to Table 45 in the column for the seven and one-half mill tax, approximately the standard tax-rate, it will be noticed that the steps for each $10,000 difference in valuations is $75.00, or nearly $8.00 per thousand. Since state aid gradually disappears as the districts approach the $240,000 valuation point, this is the approximate rate of diminution per thousand for districts levying the standard millage. For this reason there seemed to be some basis for adopting this as the initial amount. The points in the valuation scale for gradually diminishing this initial amount as the valuation increases were so fixed as to make the distribution include by regular steps practically all the districts in the State.

Another consideration was that any initial amount larger than $8.00 for the second part of the plan would require an extension downward in the alteration of the grants under Part I to valuations

below $232,000. This might easily create a large group of favored districts and thus destroy the balance brought about by the equalization secured under Form I as formulated.

REDUCTIONS.—It is believed that this plan fully satisfies the first, fourth, fifth and sixth criteria established in Chapter VIII and that it satisfies the third as fully as should be expected of any plan of General Aid. It now remains to add to the fundamental factors certain others which will prevent the State from giving aid to inefficient schools and thereby satisfy the second criterion.

1. The first point at which the State should be on its guard is in giving full aid to small attendance schools. The great waste that has come from this source has been clearly pointed out in the previous chapters. The plan of General Aid, founded on the principle of fair dealing, gives liberally to efficient rural schools and requires deductions if common school districts desire to continue a school that is uneconomical and inefficient.

It is, therefore, recommended that a standard number of pupils in average daily attendance be established for each teacher, and that, when the average daily attendance falls below such a standard, the General Aid be reduced in such proportion as the average daily attendance bears to a standard denominator. Those standards may well vary among the different types of schools. The Survey recommends that the Standard Average Daily Attendance required in one-teacher rural schools be fixed at 12 and that the standard denominator be fixed at 24. Thus a school having a daily attendance of seven would receive only seven twenty-fourths of the allotment which it would receive had it the full quota of 12 pupils per teacher in order that the best interests and welfare of the pupils attending may be promoted. The State Department of Education should have the authority to waive the rule in the case of those schools which in its judgment should, under the present circumstances of road conditions, distance, weather conditions, etc., be retained as separate schools. In union free school districts and reorganized community districts the Standard Average Daily Attendance should be placed at 20, with the same standard denominator. In cities both should be higher.

2. Another desirable limitation in the operation of this plan is the

placing of a maximum number of mills above which the State will not give aid. The maximum number of mills based upon equalized valuations for which state aid will be allowed in the use of this formula should be fixed at eight mills. This will enable even the poorest districts to have, in case any should desire, a school which is equally as good as those supported by many of the richer districts. Districts should be allowed to spend more than this, but should not receive state aid on the basis thereof.

3. Poor teaching must be prevented. While the system of General Aid recommended herein promotes in itself the employing of teachers of superior qualifications in that it offers a plan in which the State will assist in the payment of salaries, it is desirable, in order to discourage the appointment of teachers of inferior qualifications at high salaries, that a graduated series of deductions from the amount to be received from General Aid be devised so that the apportionment for each teacher of inferior qualifications in a particular position will be reduced by some amount, such as $100, the first time, by $200 the second time, and so on. As indicated in the treatment of the theory underlying state aid, it is necessary that the State uphold minimum standards of schools in every respect; but in time past provisions in the law permitting the Commissioner of Education to withhold funds have not operated with the highest efficiency because of the requirement that all the allotment be withheld. Probably the best way in which a local board may be checked in its desire to lower the efficiency of schools is by some such series of graduated deductions as suggested above.

4. In order to prevent an improper distribution of expenses among the various items of the budget the State Education Department should be authorized to withhold certain portions of the General Aid according to some pre-arranged plan based on proper standards, whenever any district spent an unusually large or unusually small proportion of its funds on any one item during the previous year, as, for instance, salaries of janitors. These standards are easily ascertained. Any percentage above or below the middle seventy percent, or any expense above or below a certain number of dollars per pupil or per teacher, should be subject to review and to deduction unless the extreme expense seems to be warranted by some unusual

conditions. Such standards as these should, of course, be revised as conditions change throughout the State. Probably the cost per unit would be a better standard, but it should be based, in part at least, upon standards derived from a percentage distribution of expenses throughout the entire State. Moreover, these standards should differ among the various classes of districts in order to be more closely adjusted to the needs and general welfare of the schools of the entire State.

5. The State Department of Education should have also the authority to make deductions from General Aid in case any district accumulates an unnecessary excessive balance of funds at the close of the year. This should be done by deducting in the formula a number of mills in proportion to what such excessive balances represent in terms of mills in the particular district in question.

Form II

Form II is the same as Form I except that it gives larger grants to those districts having a valuation higher than the standard equalized valuation that levy taxes higher than five mills, and spend more than $1320 per teacher for current expenses. The amounts that the various districts would receive under this Form are given in Table 46. This peculiar provision applies only to those districts lying within the irregular portion of the table. It will be noticed that certain districts having valuations below $240,000 are included herein. This is done in order that the districts lying just below $240,000 may not receive smaller amounts of aid than those above that amount. This Form will be of benefit particularly to the villages and cities.

Inasmuch as it is of prime importance that all districts below the average be placed upon the same footing as nearly as practicable, it seems only just that those districts which, under the previous Form, would obtain only nominal amounts, should have some reward from the State for putting forth an effort above the average for the maintenance of good schools. It is just as important to the State that districts that are progressive be encouraged in their continued educational development as that those that are behind shall be brought up to the standard.

TABLE 46.—AMOUNTS OF STATE AID DISTRICTS OF VARYING EQUALIZED VALUATIONS WILL RECEIVE UNDER FORM II FOR EACH MILL LEVIED, AND AMOUNTS OF LOCAL SUPPORT REQUIRED

Amount to be spent per teacher for current expenses	$840		$960		$1,080		$1,200		$1,320		$1,440		$1,560		$1,680		$1,800		$1,920		$2,040		$2,160	
Mills necessary to levy	3½ mill tax		4 mill tax		4½ mill tax		5 mill tax		5½ mill tax		6 mill tax		6½ mill tax		7 mill tax		7½ mill tax		8 mill tax		8½ mill tax		9 mill tax	
Equalized valuations per teacher	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid	Local support	State aid
$5,000	18	822	20	940	23	1057	25	1175	28	1292	30	1410	33	1527	35	1645	38	1762	40	1880	43	1997	45	2115
15,000	53	787	60	900	68	1012	75	1125	83	1237	90	1350	98	1462	105	1575	113	1687	120	1800	128	1912	135	2025
25,000	88	752	100	860	113	967	125	1075	138	1182	150	1290	163	1397	175	1505	188	1612	200	1720	213	1827	225	1935
35,000	123	717	140	820	158	922	175	1025	193	1127	210	1230	228	1332	245	1435	263	1537	280	1640	298	1742	315	1845
45,000	158	682	180	780	203	877	225	975	248	1072	270	1170	293	1267	315	1365	338	1462	360	1560	383	1657	405	1755
55,000	193	647	220	740	248	832	275	925	303	1017	330	1110	358	1202	385	1295	413	1387	440	1480	468	1572	495	1665
65,000	228	612	260	700	293	787	325	875	358	962	390	1050	423	1137	455	1225	488	1312	520	1400	553	1487	585	1575
75,000	263	577	300	660	338	742	375	825	413	907	450	990	488	1072	525	1155	563	1237	600	1320	638	1402	675	1485
85,000	298	542	340	620	383	697	425	775	468	852	510	930	553	1007	595	1085	638	1162	680	1240	723	1317	765	1395
95,000	333	507	380	580	428	652	475	725	523	797	570	870	618	942	665	1015	713	1087	760	1160	808	1232	855	1305
105,000	368	472	420	540	473	607	525	675	578	742	630	810	683	877	735	945	788	1012	840	1080	893	1147	945	1215
115,000	403	437	460	500	518	562	575	625	633	687	690	750	748	812	805	875	863	937	920	1000	978	1062	1035	1125
125,000	438	402	500	460	563	517	625	575	688	632	750	690	813	747	875	805	937	862	1000	920	1063	977	1125	1035
135,000	473	367	540	420	608	472	675	525	743	577	810	630	878	682	945	735	1013	787	1080	840	1148	892	1215	945
145,000	508	332	580	380	653	427	725	475	798	522	870	570	943	617	1015	665	1087	712	1160	760	1233	807	1305	855

155,000	543	297	620	340	698	382	775	425	853	467	930	510	1008	552	1085	595	1163	637	1240	680	1318	722	1395	765
165,000	578	262	660	300	743	337	825	375	908	412	990	450	1073	487	1155	525	1238	562	1320	600	1403	637	1485	675
175,000	613	227	700	260	788	292	875	325	963	357	1050	390	1138	422	1225	455	1313	487	1400	520	1488	552	1575	585
185,000	648	192	740	220	833	247	925	275	1018	302	1110	330	1203	357	1295	385	1388	412	1480	440	1573	467	1665	495
195,000	683	157	780	180	878	202	975	225	1073	247	1170	270	1268	292	1365	315	1463	337	1560	360	1658	382	1755	395
205,000	718	122	820	140	923	157	1025	175	1128	192	1230	210	1333	227	1435	245	1538	262	..	298	..	338	1845	378
215,000	753	87	860	100	968	112	1075	125	1183	137	1290	150	1398	162	1505	202	..	242	..	282	..	322	1935	362
225,000	788	52	900	60	1013	67	1125	75	1238	82.5	1350	105	..	145	..	185	..	225	..	265	..	305	202	345
235,000	823	28	940	32	..	36	..	40	..	48	..	88	..	128	..	168	..	208	..	248	..	287	..	327
245,000	..	28	..	32	..	36	..	40	..	44	..	72	..	112	..	152	..	192	..	232	..	272	..	312
255,000	..	28	..	32	..	36	..	40	..	44	..	55	..	95	..	135	..	175	..	215	..	255	..	295
265,000	..	28	..	32	..	36	..	40	..	44	..	48	..	78	..	118	..	158	..	198	..	238	..	278
275,000	..	28	..	32	..	36	..	40	..	44	..	48	..	62	..	102	..	142	..	182	..	222	..	262
285,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	85	..	125	..	165	..	205	..	245
295,000	..	28	..	32	..	36	..	40	..	44	..	48	..	52	..	68	..	108	..	148	..	187	..	227
305,000	..	24.5	..	28	..	31.5	..	35	..	38.5	..	42	..	45.5	..	49	..	92	..	132	..	172	..	212
355,000	..	24.5	..	28	..	31.5	..	35	..	38.5	..	42	..	45.5	..	49	..	52.5	..	48	..	88	..	128
405,000	..	21	..	24	..	27	..	30	..	33	..	36	..	39	..	42	..	45	..	48	..	51	..	54
455,000	..	21	..	24	..	27	..	30	..	33	..	36	..	39	..	42	..	45	..	48	..	51	..	54
505,000	..	17.5	..	20	..	22.5	..	25	..	27.5	..	30	..	32.5	..	35	..	37.5	..	40	..	42.5	..	45
605,000	..	14	..	16	..	18	..	20	..	22	..	24	..	26	..	28	..	30	..	32	..	34	..	36
705,000	..	10.5	..	12	..	13.5	..	15	..	16.5	..	18	..	19.5	..	21	..	22.5	..	24	..	25.5	..	27
805,000	..	7	..	8	..	9	..	10	..	11	..	12	..	13	..	14	..	15	..	16	..	17	..	18
905,000	..	3.5	..	4	..	4.5	..	5	..	5.5	..	6	..	6.5	..	7	..	7.5	..	8	..	8.5	..	9

The amounts of state aid under this modification of Form I are in each case one-third of the difference between the amounts in the headings of the respective columns in which they appear and the income from a five mill tax, five mills being approximately the average tax necessary to raise the amount of money coming from local sources for schools within the State as a whole and one-third being the approximate proportion of total expense borne by the State at the present time. The amount of aid that each district will receive under this Form is shown in Table 46.

Form III

The opposition which will naturally arise in any State, upon the part of the wealthier districts, because of being excluded from anything more than a nominal participation in the benefits of a plan of General Aid for schools, causes the Survey to suggest the adoption of this third Form as a compromise measure. In doing this, however, it wishes to make clear that the Form is a practical measure rather than an ideal one. The Survey firmly believes that it is a sound principle of state educational finance for wealthier districts to assist the poorer districts in raising their schools to such a plane of efficiency as will promote the best interests of the State as a whole. All districts should accept General Aid upon the basis of such a state-wide consideration of educational policy as is furnished in Form II.

The scheme recommended as Form III may be conceived as consisting of two parts, the first of which is a modification of Form I in that all the nominal grants to districts having valuations of over $240,000 per teacher are omitted. The second part provides for a redistribution to the local districts of the income from a one mill state tax except in the case of those districts having a tax-rate of less than five mills. Compensation is made for this loss to such districts by granting larger amounts to districts levying a tax greater than five mills. The purpose of this differentiation in grants to districts is to permit the application of the fifth criterion established in the previous section as governing state aid. These deductions and additions are not large, however, as may be seen from Table 47, which shows the amounts districts would receive under the

TABLE 47.—AMOUNTS OF STATE AID DISTRICTS OF VARYING EQUALIZED VALUATIONS WILL RECEIVE UNDER THE SECOND PART OF FORM III

Equalized valuations per teacher	Mills levied											
	3½	4	4½	5	5½	6	6½	7	7½	8	8½	9
$5,000	4.70	4.80	4.90	5	5.10	5.20	5.30	5.40	5.50	5.60	5.70	5.80
15,000	14	14	15	15	15	16	16	16	17	17	17	17
25,000	24	24	25	25	26	26	27	27	28	28	29	29
35,000	33	34	34	35	36	36	37	38	39	39	40	41
45,000	42	43	44	45	46	47	48	49	50	50	51	52
55,000	52	53	54	55	56	57	58	59	61	62	63	64
65,000	61	62	64	65	66	68	69	70	72	73	74	75
75,000	71	72	74	75	77	78	80	81	83	84	86	87
85,000	80	82	83	85	87	88	90	92	94	95	97	99
95,000	89	91	93	95	97	99	101	103	105	106	108	110
105,000	99	101	103	105	107	109	111	113	116	118	120	122
115,000	108	110	113	115	117	120	122	124	127	129	131	133
125,000	118	120	123	125	128	130	133	135	138	140	143	145
135,000	127	130	132	135	138	140	143	146	149	151	154	157
145,000	136	139	142	145	148	151	154	157	160	162	165	168
155,000	146	149	152	155	158	161	164	167	171	174	177	180
165,000	155	158	162	165	168	172	175	178	182	185	188	191
175,000	165	168	172	175	179	182	186	189	193	196	200	203
185,000	174	178	181	185	189	192	196	200	204	207	211	215
195,000	183	187	191	195	199	203	207	211	215	218	222	226
205,000	193	197	201	205	209	213	217	221	226	230	234	238
215,000	202	206	211	215	219	224	228	232	236	241	245	249
225,000	212	216	221	225	230	234	239	243	248	252	257	261
235,000	221	226	230	235	240	244	249	254	259	263	268	273
245,000	230	235	240	245	250	255	260	265	270	274	279	284
255,000	240	245	250	255	260	265	270	275	281	286	291	296
265,000	249	254	260	265	270	276	281	286	292	297	302	307
275,000	259	264	270	275	281	286	292	297	303	308	314	319
285,000	268	274	279	285	291	296	302	308	314	319	325	331
295,000	277	283	289	295	301	307	313	319	325	330	336	342
305,000	287	293	299	305	311	317	323	329	336	342	348	354
355,000	334	341	348	355	362	369	376	383	391	398	405	412
405,000	381	389	397	405	413	421	429	437	446	454	462	470
455,000	428	437	446	455	464	473	482	491	501	510	519	528
505,000	475	485	495	505	515	525	535	545	556	566	576	586
605,000	569	581	593	605	617	629	641	653	666	678	690	702
705,000	663	677	691	705	719	733	747	761	776	790	804	818
805,000	757	773	789	805	821	837	853	869	886	902	918	934
905,000	851	867	887	905	923	941	959	977	996	1,014	1,032	1,050

second part of the Form. The amounts that districts would receive under the two parts combined are shown in Table 48. The effect of this is to add to the aid given each district in Form I slightly varying proportions of a one mill tax, except in the case of districts with valuations over $240,000. In the latter group the state aid given in Form I is not added to the proportion of the one

TABLE 48.—AMOUNTS OF STATE AID DISTRICTS OF VARYING EQUALIZED VALUATIONS WILL RECEIVE UNDER BOTH PARTS OF FORM III COMBINED

Mills necessary to levy	3½ mill tax			4 mill tax			4½ mill tax			5 mill tax			5½ mill tax			6 mill tax		
Equalized valuations per teacher	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense
$5,000	$18	$827	$845	$20	$945	$965	$23	$1,063	$1,086	$25	$1,180	$1,205	$28	$1,297	$1,325	$30	$1,415	$1,445
15,000	53	801	854	60	914	974	68	1,028	1,096	75	1,140	1,215	83	1,252	1,335	90	1,366	1,456
25,000	88	776	864	100	884	984	113	993	1,106	125	1,100	1,225	138	1,208	1,346	150	1,316	1,466
35,000	123	750	873	140	854	994	158	957	1,115	175	1,060	1,235	193	1,163	1,356	210	1,266	1,476
45,000	158	724	882	180	823	1,003	203	922	1,125	225	1,020	1,245	248	1,118	1,366	270	1,217	1,487
55,000	193	699	892	220	793	1,013	248	887	1,135	275	980	1,255	303	1,073	1,376	330	1,167	1,497
65,000	228	673	901	260	762	1,022	293	852	1,145	325	940	1,265	358	1,028	1,386	390	1,118	1,508
75,000	263	648	911	300	732	1,032	338	817	1,155	375	900	1,275	413	984	1,397	450	1,068	1,518
85,000	298	622	920	340	702	1,042	383	781	1,164	425	860	1,285	468	939	1,407	510	1,018	1,528
95,000	333	596	929	380	671	1,051	428	746	1,174	475	820	1,295	523	894	1,417	570	969	1,539
105,000	368	571	939	420	641	1,061	473	711	1,184	525	780	1,305	578	849	1,427	630	919	1,549
115,000	403	545	948	460	610	1,070	518	676	1,194	575	740	1,315	633	804	1,437	690	870	1,560
125,000	438	520	958	500	580	1,080	563	641	1,204	625	700	1,325	688	760	1,448	750	820	1,570
135,000	473	494	967	540	550	1,090	608	605	1,213	675	660	1,335	743	715	1,458	810	770	1,580
145,000	508	468	976	580	519	1,099	653	570	1,223	725	620	1,345	798	670	1,468	870	721	1,591
155,000	543	443	986	620	489	1,109	698	538	1,236	775	580	1,355	853	625	1,478	930	671	1,601
165,000	578	417	995	660	458	1,118	743	500	1,243	825	540	1,365	908	580	1,488	990	622	1,612
175,000	613	392	1,005	700	428	1,128	788	465	1,253	875	500	1,375	963	536	1,499	1,050	572	1,622
185,000	648	366	1,014	740	398	1,138	833	429	1,262	925	460	1,385	1,018	491	1,509	1,110	522	1,632
195,000	683	340	1,023	780	367	1,147	878	394	1,272	975	420	1,395	1,073	446	1,519	1,170	473	1,643
205,000	718	315	1,033	820	337	1,157	923	359	1,282	1,025	380	1,405	1,128	401	1,529	1,230	423	1,653
215,000	753	289	1,042	860	306	1,166	968	324	1,292	1,075	340	1,415	1,183	356	1,539	1,290	374	1,664
225,000	788	264	1,052	900	276	1,176	1,013	289	1,302	1,125	300	1,425	1,238	312	1,550	1,350	324	1,674
235,000	823	238	1,061	940	246	1,186	1,058	253	1,311	1,175	260	1,435	1,293	267	1,560	1,410	274	1,684
245,000	..	230	..	..	235	..	..	240	..	..	245	..	..	250	..	..	255	..
255,000	..	240	..	..	245	..	..	250	..	..	255	..	..	260	..	..	265	..
265,000	..	249	..	..	254	..	..	260	..	..	265	..	..	270	..	..	276	..
275,000	..	259	..	..	264	..	..	270	..	..	275	..	..	281	..	..	286	..
285,000	..	268	..	..	274	..	..	279	..	..	285	..	..	291	..	..	296	..
295,000	..	277	..	..	283	..	..	289	..	..	295	..	..	301	..	..	307	..
305,000	..	287	..	..	293	..	..	299	..	..	305	..	..	311	..	..	317	..
355,000	..	334	..	..	341	..	..	348	..	..	355	..	..	362	..	..	369	..
405,000	..	381	..	..	389	..	..	397	..	..	405	..	..	413	..	..	421	..
455,000	..	428	..	..	437	..	..	446	..	..	455	..	..	464	..	..	473	..
505,000	..	475	..	..	485	..	..	495	..	..	505	..	..	515	..	..	525	..
605,000	..	569	..	..	581	..	..	593	..	..	605	..	..	617	..	..	629	..
705,000	..	663	..	..	677	..	..	691	..	..	705	..	..	719	..	..	733	..
805,000	..	757	..	..	773	..	..	789	..	..	805	..	..	821	..	..	837	..
905,000	..	851	..	..	869	..	..	887	..	..	905	..	..	923	..	..	941	..

Mills necessary to levy	6½ mill tax			7 mill tax			7½ mill tax			8 mill tax			8½ mill tax			9 mill tax		
Equalized valuations per teacher	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense	Local support	State aid	Total expense
$5,000	$33	$1,532	$1,565	35	$1,650	$1,685	$38	$1,768	$1,806	40	$1,886	$1,926	43	$2,003	$2,046	45	$2,121	$2,166
15,000	98	1,478	1,576	105	1,591	1,696	113	1,704	1,817	120	1,817	1,937	128	1,929	2,057	135	2,042	2,177
25,000	163	1,424	1,587	175	1,532	1,707	188	1,640	1,828	200	1,748	1,948	213	1,856	2,069	225	1,964	2,189
35,000	228	1,369	1,597	245	1,473	1,718	263	1,576	1,839	280	1,679	1,959	298	1,782	2,080	315	1,886	2,201
45,000	293	1,315	1,608	315	1,414	1,729	338	1,512	1,850	360	1,610	1,970	383	1,708	2,091	405	1,807	2,212
55,000	358	1,260	1,618	385	1,354	1,739	413	1,448	1,861	440	1,542	1,982	468	1,635	2,103	495	1,729	2,224
65,000	423	1,206	1,629	455	1,295	1,750	488	1,384	1,872	520	1,473	1,993	553	1,561	2,114	585	1,650	2,235
75,000	488	1,152	1,640	525	1,236	1,761	563	1,320	1,883	600	1,404	2,004	638	1,488	2,126	675	1,572	2,247
85,000	553	1,097	1,650	595	1,177	1,772	638	1,256	1,894	680	1,335	2,015	723	1,414	2,137	765	1,494	2,259
95,000	618	1,043	1,661	665	1,118	1,783	713	1,192	1,905	760	1,266	2,026	808	1,340	2,148	855	1,415	2,270
105,000	683	988	1,671	735	1,058	1,793	788	1,128	1,916	840	1,198	2,038	893	1,267	2,160	945	1,337	2,282
115,000	748	934	1,682	805	999	1,804	863	1,064	1,927	920	1,129	2,049	978	1,193	2,171	1,035	1,258	2,293
125,000	813	880	1,693	875	940	1,815	938	1,000	1,938	1,000	1,060	2,060	1,063	1,120	2,183	1,125	1,180	2,305
135,000	878	825	1,703	945	881	1,826	1,013	936	1,949	1,080	991	2,071	1,148	1,046	2,194	1,215	1,102	2,317
145,000	943	771	1,714	1,015	822	1,837	1,088	872	1,960	1,160	922	2,082	1,233	972	2,205	1,305	1,023	2,328
155,000	1,008	716	1,724	1,085	762	1,847	1,163	808	1,971	1,240	854	2,094	1,318	899	2,217	1,395	945	2,340
165,000	1,073	662	1,735	1,155	703	1,858	1,238	744	1,982	1,320	785	2,105	1,403	825	2,228	1,485	866	2,351
175,000	1,138	608	1,746	1,225	644	1,869	1,313	680	1,993	1,400	716	2,116	1,488	752	2,240	1,575	788	2,363
185,000	1,203	553	1,756	1,295	585	1,880	1,388	616	2,004	1,480	647	2,127	1,573	678	2,251	1,665	710	2,375
195,000	1,268	499	1,767	1,365	526	1,891	1,463	552	2,015	1,560	578	2,138	1,658	604	2,262	1,755	631	2,386
205,000	1,333	444	1,777	1,435	466	1,901	1,538	488	2,026	1,640	510	2,150	1,743	531	2,274	1,845	553	2,398
215,000	1,398	390	1,788	1,505	407	1,912	1,613	423	2,036	1,720	441	2,161	1,828	457	2,285	1,935	474	2,409
225,000	1,463	336	1,799	1,575	348	1,923	1,688	360	2,048	1,800	372	2,172	1,913	384	2,297	2,025	396	2,421
235,000	1,528	281	1,809	1,645	289	1,934	1,763	296	2,059	1,880	303	2,183	1,998	310	2,308	2,115	318	2,433
245,000	..	260	..	..	265	..	..	270	..	..	274	..	..	279	..	..	284	..
255,000	..	270	..	..	275	..	..	281	..	..	286	..	..	291	..	..	296	..
265,000	..	281	..	..	286	..	..	292	..	..	297	..	..	302	..	..	307	..
275,000	..	292	..	..	297	..	..	303	..	..	308	..	..	314	..	..	319	..
285,000	..	302	..	..	308	..	..	314	..	..	319	..	..	325	..	..	331	..
295,000	..	313	..	..	319	..	..	325	..	..	330	..	..	336	..	..	342	..
305,000	..	323	..	..	329	..	..	336	..	..	342	..	..	348	..	..	354	..
355,000	..	376	..	..	383	..	..	391	..	..	398	..	..	405	..	..	412	..
405,000	..	429	..	..	437	..	..	446	..	..	454	..	..	462	..	..	470	..
455,000	..	482	..	..	491	..	..	501	..	..	510	..	..	519	..	..	528	..
505,000	..	535	..	..	545	..	..	556	..	..	566	..	..	576	..	..	586	..
605,000	..	641	..	..	653	..	..	666	..	..	678	..	..	690	..	..	702	..
705,000	..	747	..	..	761	..	..	776	..	..	790	..	..	804	..	..	818	..
805,000	..	853	..	..	869	..	..	886	..	..	902	..	..	918	..	..	934	..
905,000	..	959	..	..	977	..	..	996	..	..	1,014	..	..	1,032	..	..	1,050	..

mill tax inasmuch as the principle which caused their inclusion in Form I is satisfied in the second part of Form III.

Form IV

Form IV is suggested as an alternative to Form III to be used in case there is sufficient state money available. It is similar to Form III except that the first part of it is based upon Form II rather than upon Form I. In other words, the amounts given in Table 46 are used in the addition instead of the amounts given in Table 45. In computing aid under this Form the nominal amounts in the lower portion thereof should be omitted in the same way as was done in the computation of the amounts for Form III.

This is an improvement upon Form III in that it recognizes the efforts of high valuationed districts to furnish superior educational facilities for their children. The advantages claimed for Form II in this respect apply also to Form IV. The Survey has not worked out a table for this Form because of the lack of space, but it would be exactly like Table 47 except in that portion corresponding to the middle block of Table 46.

The Use of These Tables

In order to show how these tables, which have been prepared in accordance with the formula, should be used, let it be assumed that a district board of education wishes to prepare its budget for the following year and that it desires to know the tax-rate which should be levied upon the property within the district in order to support its schools. The procedure that such a board should follow would be similar to this:

1. Fix upon the amount of the total expenses which would be necessary to maintain the schools for the coming year. In doing this, exclude all items that come under the head of capital outlays, such as, new buildings and equipment. This is necessary inasmuch as General Aid applies to expenses only. (There are, however, certain items of Special Aid that apply to capital outlays as are indicated in the following chapter.)

2. Next, determine the amount that will be received by the dis-

trict for such various forms of Special Aid as would apply to expense items, namely, for special teachers of physical training and vocational education, for books and apparatus, for high school teachers, for transportation, for superior teachers in rural schools and for supervisors.

3. Subtract from the total estimated expenses under (1) the total of the amount of Special Aid under (2).

4. Determine the number of teachers, principals, supervisors and superintendents that will be employed during the coming year, excluding those special teachers for which state aid is given, such as teachers of physical training, agriculture and household arts.

5. Divide the difference obtained in (3) by the number of teachers obtained in (4). This gives the total expenses per teacher to which General Aid applies.

6. Ascertain the equalized valuation for the entire district by dividing the assessed valuation by the rate of equalization fixed by the State Tax Commission. This amount divided by the number of teachers to be employed the following year will give the Equalized Valuation per Teacher.

7. If aid is granted under Form I or Form II the next step would be to take either Table 45 or Table 46 and find on the first line thereof the nearest amount corresponding to the expenses per teacher obtained under (5). The tax-rate immediately beneath will show the approximate number of mills that will have to be levied. Glancing down the column beneath these figures to the spaces opposite the Equalized Valuation per Teacher obtained in (6) will be found both the amount of state aid that will be received per teacher from the State, and also the amount to be raised by local taxation for each teacher.

8. The total amount to be raised by local tax and the total amount of state aid to be received can be found by multiplying the figures in the spaces indicated in (7) by the number of teachers to be employed.

9. The actual number of mills to be levied may be found by dividing the equalized tax-rate by the equalized rate of assessment as given by the State Tax Commission.

10. In case Form III is used (7) will not be followed. Instead it

will be necessary in using Table 48 to first find the line in the left hand column containing the nearest equalized valuation per teacher to that obtained under (6). Then follow this line across the page to the right until the amount nearest to the expense per teacher obtained in (5) is found in one of the columns designated "Total Expense," the right hand column in each subdivision. The tax-rate given in the heading of this subdivision will be the equalized tax-rate that must be levied. The amount of state aid and the amount to be raised by local tax in the entire district may be found, as in (8), by multiplying the corresponding figures in the two columns to the left in the same subdivision by the number of teachers to be employed the following year. The actual tax-rate may be found by following the direction given under (9).

Comments on Forms.—It is important to point out that the State Department in determining the amount of General Aid any district would receive according to these Forms should use the data regarding the valuations and tax-rates for the current year and not for the year preceding. General Aid is to complement local effort each successive year. If data for the previous year are used both state aid and tax-rates will go up and down alternately. A high tax-rate the previous year will bring a high amount of General Aid the present year, which will cause a low tax-rate to be levied the present year, to be followed in the subsequent year by a small state grant and a high tax-rate.

In case the boards of the local school districts will not under present practice have full information at hand regarding the equalized valuations prescribed by the State Tax Commission at the time of fixing the local tax-rates, the Survey recommends that the State Tax Commission be required by law to furnish such equalization rates to local school boards by a specified date, which rate shall be used solely for the administration of the educational finances of the State in the levying of local taxes and in the distribution of State subsidies to schools.

Another point to bear in mind is that this aid is to be granted on the basis of current expenses only and is not influenced by money paid out for new buildings, equipment, supplies, etc.; aid given for such purposes is discussed in the following chapter on Special Aid.

Finally, the reductions outlined under Form I (page 143) are to apply in the case of Forms II, III, and IV.

Formula for Determining the Equalized Tax-Rate

The equalized tax-rate or millage may be ascertained also by use of the following formula:

$$M = \frac{\frac{T.E. - \text{Special Aid}}{T}}{\$240{,}000}$$

M equals number of equalized mills or tax-rate; T.E. equals estimate of total expenses; Special Aid, total of all forms of special aid for expenses; and T, number of teachers.

Determination of Number of Teachers on Basis of Number of Pupils

Instead of actually counting the number of teachers in the scheme recommended above, it would be possible to determine the number of teachers by dividing the number of pupils in the district by the number of pupils established as the standard unit for a class. In this event it would be better to use the number in average daily attendance, since this would have the effect of promoting more regular attendance. Aggregate attendance or total number of days attended during the year favors longer terms, but increased returns from the State for larger expenditures are already secured under the other elements of the proposed plan. Different units of average daily attendance per teacher should be fixed for rural and urban districts, likewise for elementary and high schools and for special classes. Additional teachers should be allowed for teaching special subjects and the units in this case should be larger than for regular teachers. The California plan embodying most of these features is probably the best of this kind.

The Survey has not incorporated this feature into its recommendations because it would complicate the plan considerably, and because it would introduce uniformity to such an extent that it would take away certain freedom of action from the local board. Since New York now uses the actual number of teaching positions, it

would seem best at least during the first years of the operation of the proposed plan to retain the same basis. In its present form the plan has checks against low attendance per teacher and these might prove sufficient.

Expediency a Sufficient Warrant for Adoption of Form IV in New York at the Present Time.—In this chapter there have been presented four alternative Forms for General Aid. The first two comply with the criteria in the preceding chapter and, therefore, meet all the essential demands that can properly be required of a system of state support. Forms III and IV incorporate a system of state aid which can be recognized only on the ground of practical expediency. It distributes back to the local communities approximately the amounts of money that would be raised in each of them by a one mill tax. The fact that a number of cities have reached their legal limits of taxation and have been compelled to seek larger appropriations from the State in order to increase properly the salaries of their teachers seems sufficient proof to incorporate this additional element into a system of state aid on the grounds of expediency. It is important, however, that these two different elements in Forms I and II and in Forms III and IV be recognized and that they be kept separate in the formulation of future plans for General Aid.

The practicability of all these Forms depends, however, to a considerable degree upon the amount of money that each of them would require. In the last chapter of the Survey estimates of these amounts are given. In the next chapter the plan recommended for Special Aid which should supplement the system of General Aid, will be described.

CHAPTER XI

SPECIAL AID

SPECIAL Aid is distinguished from General Aid: In that (1) it is granted for specific purposes, whereas general aid covers a wide range of items, and (2) its purpose is to reward local districts for undertaking extensions or for performing some meritorious thing that the average district does not have the desire or the courage to undertake. Thus such districts may be led to enter upon a new project with the knowledge that they will obtain a particular reward for so doing.

The forms of special aid now in existence in New York to which the Survey gave attention will be considered:

1 AND 2. THE PHYSICAL TRAINING AND VOCATIONAL TEACHER QUOTAS.—The operation of these quotas has not been studied intensively. They satisfy in principle the third criterion, page 118. Since equalization of the educational burden is largely secured through a revised form of General Aid, it is recommended that these quotas be retained in their present form.

3. BOOKS AND APPARATUS QUOTAS.—The form of state support second in importance to the rural schools is the books and apparatus quota, in which case the State pays an amount equal to that raised in the districts. The principle back of this form of grant is to be commended in that it stimulates local districts to do their best. Its weakness lies in the fact that it takes no account of the varying capacity of districts to raise money for these purposes. However, since the amounts of money required are not large, this objection is not of great force. Its present form should be retained, but a larger appropriation, amounting to at least $250,000 per year, should be granted in order to meet the demands upon it. At present, unfortunately, full returns cannot be allowed because of limited funds.

4. ACADEMIC QUOTAS.—The academic quotas granted to high schools have in the past served as a reward for the establishment of

new departments or extension of old departments in local schools (Criterion No. 3). They might well serve that purpose still in small villages where people hesitate to establish high schools, but the value of this form of state aid in cities and larger villages has passed. The fact that the grant has been in the same amount irrespective of the ability of the districts to pay it or of the amount of money that they are putting into high schools has acted as a limitation upon its highest efficiency. It is recommended that this form of state aid be dropped and that instead there be granted to union free school and common school districts aid for high schools in proportion to the number of teachers employed and as supplementary to the more fundamental form of state aid which takes into account true valuation and amount of money spent as will be outlined below.

5. High School Tuition Quotas.—The $50 per year paid by the State for tuition in high schools for non-resident students has no place in a rational system of school support, although it is intended to achieve a worthy aim and doubtless has been of great benefit to a large number, but by no means to all the young people of the State residing in rural districts. In its place it is recommended that every child residing in a district not having a high school, who has satisfactorily completed the elementary schools, shall be given the right to attend any standard high school in the State that he chooses, within certain reasonable limitations. His tuition should be paid by his local district, which should include the charge as part of its other expenses. The State should then reimburse it proportionately to its true valuation per teacher and its tax-rate under General Aid. The tuition-rate charged by a high school should be as large as the cost per pupil for the previous year, determined in accordance with the rules of the State Department.

The following method for estimating the cost per pupil is suggested: Add to the total expenses of the high school a reasonable share for deterioration of plant and equipment. Subtract the apportioned amount of General Aid and the specific amounts of Special Aid coming to the high school from the State. Divide this amount by the average daily attendance.

New Forms of Special Aid

1. For High Schools.—Because of the additional cost of high schools over and above those for elementary schools and especially because of the fact that there is a great scarcity of high schools in the rural regions of New York State, it is recommended, in order to encourage the establishment and the extension of such schools in the common and union free and academic districts, that $200 be granted by the State to every district for each teacher appointed either in a newly established high school or for each teacher added to a present high school. This aid is to apply to junior high schools in the same way as it applies to senior high schools, provided the teacher for whom the aid is granted, possesses the standard qualifications established by the Board of Regents, requiring graduation from college and professional preparation for teaching. The period for which such aid is granted should be limited to 20 years.

It should be remembered in this connection that any increase in the number of teachers without a change in the true valuation operates to lower the equalized valuation per teacher and thus to increase the amount of aid received from the State, and likewise any increase in the tax-rate levied to maintain a high school receives a correspondingly increased aid. This Special Aid is given in addition to General Aid in order to offer still greater inducements to the people in the rural communities to secure the best educational opportunities for their children. Experience has proved that people in rural communities are less inclined to provide the best educational facilities than people in the cities so that these forms of Special Aid are all the more necessary to secure the best interests of the State as a whole.

2. Aid Should be Granted for Erection of School Houses and Teacherages upon the Following Basis: Districts having a valuation per teacher of

Less than $50,000	30	percent of cost of building and equipment
50,000–$99,000	25	" " " " " " "
100,000–149,000	20	" " " " " " "
150,000–199,000	15	" " " " " " "
200,000–249,000	10	" " " " " " "
250,000–299,000	5	" " " " " " "
300,000 and over	0	" " " " " " "

This aid should be subject in each case to the approval of the State Department of Education, both from the point of view of the nature of the site and the plans of the building, and also from the point of view of whether the erection of such a building in such a place is best adapted to promoting the best educational advantages for the children of the entire community district in which the building is to be located. It is not intended that this state aid should be given to assist in the erection of buildings that satisfy needs of small groups of children, unless this is unavoidable. The State should not aid, under any circumstances, any measure which is not calculated to further the best interests of the State as a whole. Local preferences are to be considered only in so far as they affect the State's best interests.

3. Improvement of Buildings.—A similar form of aid should be granted to communities for the making of major improvements to buildings, such as could be considered capital outlays within the rules of the State Department of Education, the amounts to be in accordance with the plan proposed above.

4. Aid for Purchase of Trucks and Wagons.—This aid is recommended in the belief that first class equipment in this particular not only promotes the highest welfare of the school, but it is in the end the most economical. Trucks and wagons are just as important as a school building or a teacher in a well-organized community school system. Experience has shown that rural people are not favorably disposed to adopt measures in this particular of their own volition. It is believed that this feature is of such importance to the welfare of the State as a whole that special aid should be granted for this purpose in accordance with the plan outlined for schoolhouses in paragraph 2 above.

It is to be noted that this form of aid as well as the two preceding are for capital outlays rather than for expenses. Without this aid the entire burden of the proper extension and equipment of the school plant falls upon local districts. This should not happen since many of them are handicapped by such low valuations of property that they cannot afford to furnish the kind of equipment which makes possible the proper educational opportunities for every child.

Aid is granted in this form rather than in specific amounts because

of the importance of obtaining standards that are adapted to the varying conditions under which it should be carried on and because with such large items of expense the amount that it costs is the best standard. The plan here proposed also makes possible the adaptation of the amounts to the ability of the district to pay, the advantages of which have been shown in the chapter on General Aid. Specific grants for specific kinds of service, which disregard the amount of local effort required, do not, it is believed, promote the best interests of the schools.

5. Transportation.—In order to assist communities in bearing the expenses of transportation, it is recommended that Special Aid be granted on the basis of the deficiency in valuation and the amount expended by the district during the previous year, as shown in the following table:

Table 49.—Equalized Valuation Per Teacher and Percent of Expenses for Transportation to Be Paid by State

Equalized valuation per teacher	Percent of expense to be paid by State
$0– $9,000	96
10,000– 19,000	92
20,000– 29,000	88
30,000– 39,000	84
40,000– 49,000	80
50,000– 59,000	76
60,000– 69,000	72
70,000– 79,000	68
80,000– 89,000	64
90,000– 99,000	60
100,000–109,000	56
110,000–119,000	52
120,000–129,000	48
130,000–139,000	44
140,000–149,000	40
150,000–159,000	36
160,000–169,000	32
170,000–179,000	28
180,000–189,000	24
190,000–199,000	20
200,000–209,000	16
210,000–219,000	12
220,000–229,000	8
230,000–239,000	4

6. Teachers in Rural Schools.—To induce competent teachers to go into the outlying rural schools, where at present they are seldom found, it is recommended by the Survey that the State make a direct grant of $10 per month to the district for the benefit of each individual teacher possessing the qualifications named below who teaches in an outlying one-teacher rural school designated by the State Department as a one-teacher rural school which should not be abandoned and consolidated with other schools in any future scheme of organization; this grant to be increased to $15 per month for the second year and $17 and $20 for the third and fourth years. The qualifications to be fulfilled should be either:

(*a*) A normal school graduate or equivalent with three years of teaching experience, or

(*b*) A graduate of one of the rural teacher training departments of the normal school as provided for in the section of the Survey on Preparation of Teachers.

This grant is made directly to the teacher in order that the local district may not include it as part of her regular salary in the operation of the minimum salary law and also in order that a local school district may not obtain benefit thereby.

The application of this aid is limited to outlying districts in order that the State may not encourage the continuance of one-teacher schools which, in the interests of the schools of the entire State, should be consolidated with a central school.

7. Supervisory Quota.—A supervisory quota of $800 per year now applies to those villages and cities employing a superintendent. This quota as now constituted does not affect the rural school districts. It should be extended so as to apply to community districts employing a supervising principal giving less than one-half of his time to teaching. As in the case of the academic quota it has served good use in the past, but does not, in the judgment of the Survey, reward school districts or stimulate them to put forth greater effort except in the case of those districts that are considering for the first time or who have recently voted to have a superintendent of schools. It should be modified so as to be made applicable for a period not exceeding twenty years from the creation of the office.

8. Abandoned Buildings.—In order to induce citizens to permanently abandon the one-teacher schools, other than those which the State Department of Education has approved for continuance on sufficient grounds, it is recommended that $100 be granted for each such building so abandoned for a period of twenty years.

CHAPTER XII

FIELD WORK

THE Administration Division of the Survey has suggested certain changes in the local territorial unit for the support of schools. The Financial Section has likewise recommended such changes in the preceding chapters, and also in succeeding chapters relative to the system of subventions or aid from the State. It was very much desired that these suggested modifications be tried out in actual situations both in order that the Survey might have a check upon its recommendations through actual trial, and also in order that the citizens of the State might have reliable data upon which to base their judgments as to the wisdom of the recommendations made by the Survey in this field.

At the time the Financial Section was compelled to begin its field work, the Administrative Division of the Survey had not as yet completed the redistribution of the territory in any county upon purely educational grounds. It was necessary, therefore, for the Financial Section to make such a redistribution in the territory of such counties as were assigned to it, namely, Delaware, Monroe and Tompkins, in order to have a proper basis for carrying on the necessary financial studies. These three counties furnished a wide range of situations typical of the varied conditions existing throughout the entire State.

Redistribution of Territory into School Districts

In dividing the territory in these counties into more efficient school districts the Financial Section of the Survey endeavored to obtain data which would be of assistance in determining costs of schools under any of a number of reorganizations which might finally be recommended by the Administration Section. The Committee of Direction, through its chairman, George A. Works, performed a

very helpful part in thus co-ordinating the efforts of the two divisions of the Survey.

One of the first tasks of the field work was to agree upon principles and standards which would govern each member of the staff as he went out into his own territory. After a preliminary conference at Ithaca and a preliminary visit to the various territories in which each member was to work, these principles and standards were finally agreed upon in a second conference held at Ithaca. During the time the field work was being carried on, the Director in charge of the Financial Section visited each of the territories and furthered co-ordination of the work. The purpose in all of this was to make sure that each member of the staff was working in harmony with all of the others and was making at the same time the proper adaptations of the principles and standards to the peculiar situations found in the different regions. In other words, it was intended that they be guided by principles rather than by rules. While each man's work was to be such that it would be comparable with the others, at the same time he was expected to exercise such discretion as would permit the working out of those plans that were best adapted to each community.

The principles adopted for guidance in this work were as follows:

1. The entire territory of such sections of each of the counties chosen for study shall be divided into territorial units for both elementary and high school purposes.

2. Each elementary school unit shall embrace such territory as will best further the education of all of the children contained therein, subject only to such limitations as environing conditions require.

3. The elementary school districts thus determined upon shall then be grouped into high school units in such a way as will further the giving of the best educational opportunities to all of the children in the entire region.

4. One of these high school units, or when conditions seem to require it, two or three such high school units, shall be formed into a community unit.

5. In determining the bounds of these various units the surveyor will be guided by his own judgment after going over the ground, and after obtaining the advice of the district superintendent and of

such trustees and citizens with whom he may have opportunity to consult. Generally speaking, the advice of the district superintendent will be found better than that of any other person, and it is much to be desired that each field worker obtain as much assistance from each of the district superintendents as is possible.

STANDARDS.—The standards adopted for the best realization of the above principles were as follows:

1. Number of pupils per teacher.
   (*a*) Elementary Schools. No teacher should have more than 40 pupils, preferably not more than 30, nor less than 12 pupils, unless exceptional conditions such as climatic or topographical conditions or sparse settlements warrant such a small number.
   (*b*) High Schools. One teacher to 20 pupils. No high school should have less than three teachers nor less than four years of work—a high school may include grades seven and eight when they are organized as part of a junior high school.
2. Longest walk.
   (*a*) To school building, one and one-half miles.
   (*b*) To meet conveyance, three-quarters of a mile.
3. Longest haul.
   The time haul limit rather than the distance limit is considered fundamental. The limit of one hour is placed as the maximum. For wagons, the distance limit for this time limit would ordinarily be two and one-half or three and one-half miles; for auto trucks, eight to twelve miles.
4. In interpreting the above standards account should be taken of unfavorable conditions as regards:
   (*a*) Amount of rainfall and snow during the school year, the extent of drifted roads and length of time during which they are ordinarily in this condition.
   (*b*) Bad roads for other reasons.
   (*c*) Opportunities for shelter at waiting points.
5. In interpreting the above standards it will be necessary to take into account also:
   (*a*) Type of roads.

(*b*) Topographical conditions such as high hills or any other barrier of impediment.

(*c*) The number of children that live in each part of the entire county, particularly in small villages.

(*d*) Condition of buildings, particularly the new ones.

METHOD OF WORK.—The method of operation of the surveyors when in the field may best be set forth in the words of one of them, Mr. Thomas A. Bock.[1]

"With these standards in mind each surveyor went to work with the district superintendent of the territory which it was proposed to theoretically reorganize.

"First a map of the territory was sought. Wherever possible the topographical map of the United States Geological Survey was used. On this schoolhouses and dwellings are already marked with considerable accuracy.

"With a pen the district superintendent carefully outlined the boundaries of the existing school districts.

"It should be noted here that in New York State, the school district, comprising the sending area about a single schoolhouse, is a corporate unit. It has very little relation to the township in which its territory lies. It may, in fact, lie in several townships and in several counties. It has its own trustee, or trustees; employs its own teacher; levies its own taxes; makes loans and purchases, and is financially independent of every other part of the township. This makes it a comparatively easy matter to transfer a school district from one township to another, or to group any number of districts together. This differs from the situation in Pennsylvania, where a sub-division of a township having a single schoolhouse cannot be transferred from one township to another without breaking off corporate relations with one township and establishing new corporate relations with another township, and readjusting the property interests and indebtedness which are affected by the process.

"With the aid of the district superintendent districts were marked out on the topographical map which, with the aid of such

[1] Mr. Bock's entire article will be published in Schoolmen's Week Proceedings, 1922, University of Pennsylvania Bulletin.

reasonable transportation as was thought feasible, would bring the largest possible number of children together into graded schools.

"In making these districts considerable time was spent in examining roads and making sure by actual inspection of the exact location of the dwellings of those children who dwelt farthest from the proposed schoolhouse. The map having been drawn to scale, it was not, in most cases, necessary to measure distances.

"Existing schoolhouses that were comparatively modern and would fit in with the new arrangements were to be continued in use. But in many cases new buildings were indicated. These were tentatively located, when possible, at such points as seemed to correspond with the natural gathering places of the community. Very frequently this happened to be in or near a village, but in many cases, the distance to the village was too great and other points, not community centers, but the junction of important valleys or roads, had to be selected. Occasionally the pupils of only two schools could be brought together at one schoolhouse, and a question arose as to whether one or two teachers should be provided. Not infrequently, in Delaware County, the location of a small one-teacher school could not be changed and the only question that arose was as to the need for a modern building and equipment and an efficient teacher.

"When all the territory of a given district superintendent had been thus cut up into the smallest possible number of new school districts, and the number of school buildings had, in this way, been reduced to the smallest number that the topography would allow, or the district superintendent's judgment would approve, the newly formed districts (still using the word "district" to signify the "sending area" about a schoolhouse) were grouped into so-called school townships. These were not co-terminous with, and had no relation to the civil townships.

"These school townships were theoretically organized for administrative purposes. Usually a beginning was made by first combining into one group those districts which had a common trading center or lay in the same stream basin. Then the remaining smaller districts were united to those school townships which the topography, the usual course of travel, and the opinion of the district superintendent seemed to suggest.

"These groupings into so-called community center districts, or school townships, sometimes determined the location of the high schools, though at times one school township would have several high schools. Usually the high schools were located on the basis of accessibility to the largest possible number of children. Efforts were always made to place them in a consolidated school building.

"The high schools included were of four types: grades seven to ten, and seven to twelve academic, and seven to ten and seven to twelve Smith-Hughes type. Sometimes it was necessary to provide one agriculture and one homemaking teacher to work alternately in two small schools."

Computation of Costs

The Project Blank.—After the surveyors had, in the manner described above, covered their districts they proceeded to assemble costs of the reorganized schools. Blank forms were prepared for this purpose which required, in the first place, such a description of the various districts as to make certain, that all of the territory was included in some project so that anyone not acquainted with the field could easily make certain that such had been done. In the second place the description of the district required such data as would make possible a check upon the judgment of the surveyors regarding the number of pupils coming from each of the districts for each of the various types of schools; and similar definite information relative to those pupils who were to be transported, regarding the type of vehicle that was to be used and the wage necessary to pay the driver. Finally, spaces on the blank were provided in which the surveyors were required to place the valuations and the tax-rates, both actual and equalized, of each of the districts in order that the data might be conveniently at hand for the use of the surveyors and those who later examined their work under the present as well as under the reorganized system. The financial statement of the blank was designed to cover every essential item of expense. It was also so arranged that it could be conveniently totaled and proper deduction made for various forms of state aid. This form, called the "Project Blank" is given herewith.

PROJECT BLANK

New York Rural School Survey

Financial Section

Local Reorganization Project No.....

School located at.....

County..... Supervisory District.....

1. Towns involved — District numbers
   1. Nos.
   2. Nos.
   3. Nos.
   4. Nos.

   Whole number of elementary pupils involved.....
   Secondary pupils.....

2. Schools located in the above towns which are not consolidated.
   Those checked might properly be attached to this project to form a "school town" in a county reorganization.
   1. Nos.
   2. Nos.
   3. Nos.
   4. Nos.

3. Schools located in the above towns that may be taken into other consolidation projects or attached thereto in a county reorganization.
   1. Nos.
   2. Nos.
   3. Nos.
   4. Nos.

4. Pupils involved — Probable number of pupils

District	Grades 1 to		Grades to		Grades to	
	—	—	—	—	—	—
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
Totals						

Number of teachers needed—Elem.....High.....

5. Transportation

District	No. pupils	Vehicles	Annual wage
1.	.....	.....	.....
2.	.....	.....	.....
3.	.....	.....	.....
4.	.....	.....	.....
5.	.....	.....	.....
6.	.....	.....	.....
7.	.....	.....	.....
8.	.....	.....	.....
9.	.....	.....	.....

6. Assessed valuations District	Assessed valuation	True valuation	Actual tax-rate	True tax-rate
1.	.....	.....	.....	.....
2.	.....	.....	.....	.....
3.	.....	.....	.....	.....
4.	.....	.....	.....	.....
5.	.....	.....	.....	.....
6.	.....	.....	.....	.....
7.	.....	.....	.....	.....
8.	.....	.....	.....	.....
9.	.....	.....	.....	.....

FINANCIAL STATEMENT

First Year of Operation

	Elementary Grades —to—	Secondary Grades —to—	Combined
I. Capital Outlays			
1. Building—Elem. rooms.....	.....		
Sec. rooms.....		.....	.....
2. Furniture	.....	.....	.....
3. Site, water, supply, sewage disposal, grading, walks	.....	.....	.....
4a. Wagons—elem.....sec.....	.....	.....	.....
4b. Trucks —elem.....sec.....	.....	.....	.....
Total	.....	.....	.....
Less amount for which building may be sold this year			
Total outlay	.....	.....	.....
II. Current expenses			
II. 5a. Salaries elem. teachers			
.... at $..... $.....			
.... at			
.... at	.....		
5b. Sal. sec. teach. (acad. or voc.?)			
.... at ..... "?			
.... at ..... "?			
.... at ..... "?			
6. Other expenses of instruction			
7. Operation			
a. Salaries and wages of janitor, etc.	.....	.....	.....
b. Other expense of operation	.....	.....	.....
8. Maintenance	.....	.....	.....
9. Transportation			
a. Salaries	.....	.....	.....
b. Upkeep of vehicles including tires	.....	.....	.....
Gas and oil	.....	.....	.....
10. Other auxiliary agencies	.....	.....	.....
11. Fixed charges	.....	.....	.....
12. General control	.....	.....	.....
13. Total current expenses	.....	.....	.....

FINANCIAL STATEMENT—*Continued*

FIRST YEAR OF OPERATION

	Elementary Grades —to—	Secondary Grades —to—	Combined
III. Debt Service			
14. School house bonds retired first year	.....	.....	.....
15. Interest on school house bonds	.....	.....	.....
16. Truck and wagon notes paid first year	.....	.....	.....
17. Interest on such notes	.....	.....	.....
18. Total debt service	.....	.....	.....
IV. TOTAL AMOUNT TO BE RAISED FIRST YEAR	.....	.....	.....

	Elementary	Secondary	Combined
Amount to be raised first year (from page 2)	.....	.....	.....
Tax-rates			
Actual rate assuming State aid supplies			
.... dist. quotas at $.... $....			
.... dist. quotas at			
.... teach. quotas at			
.... teach. quotas at			
.... teach. quotas at			
.... academic quotas at			
.... tuition pupils at			
Book-apparatus aid			
Smith-Hughes aid			
National gov't			
State "			
Total	.....	.....	.....
Amount to be raised by local tax	.....	.....	.....
Actual rate on ass. valuation	.....	.....	.....
True tax-rate	.....	.....	.....
True tax-rate on current expenses assuming all to be paid by local tax	.....	.....	.....
True tax for outlays assuming entire amount to be paid in one year by local tax	.....	.....	.....
True tax-rate—debt service this year	.....	.....	.....
Actual rate same territory if this district had existed in 1919–20 and maintained, same schools as located therein at that time	.....	.....	.....

STANDARDS.—General instructions regarding the preparation of the "project blank," including the statement of standards to be observed in the work were as follows:

In determining plans for financing remember:

1. You are planning schools for the children in the entire region, town, community or county.

2. That other things being equal, the larger the school the better.

3. That if schools must be smaller than the standards, plans will have to be studied for state aid in case true valuations per teacher are low.

4. That if territory chosen for elementary schools does not have sufficient pupils for an efficient high school you may consider financial plans both for a joint high school district including cost of transportation and board and also as an alternative, a plan for paying tuition in another high school.

5. The following standards for determining costs shall be observed except when a deviation from them is clearly warranted by the facts found in the local situation:

Capital outlays.—Building, $4,000 per room, elementary school; $5,000 per room, high school.

Equipment, $650 per room. Additional equipment for agriculture, minimum $200; for homemaking, minimum $300. $500 desirable in each case when assessed valuation warrants.

Transportation.—Automobile, large van $3,500, small van $1,500, wagon $400–$500.

Current expenses—salaries.—Salaries of elementary teachers, minimum $800 in consolidated schools, $720 in one-teacher schools. A uniform schedule should be followed in each county according to salaries now paid in schools as similar in character as can be found.

Salaries in high schools obtained from Survey's study of New York Salaries 1920–21, Medians:

Principals, academic, $1,600.

Principals, teaching agriculture, $2,400.

Teachers, academic, $1,100.

Teachers, agriculture, head of department, $2,000.

Teachers, homemaking, $1,100.

Transportation—cost per pupil.—Illinois study 1921, $0.22 per day.

Ohio study, $0.16 per day.

Preble County, Ohio: Wagons owned by district, $0.20 per day. Automobile vans owned by district, $0.12½ per day. Automobile vans now owned by district, $0.23 per day.

Pennsylvania $0.16 per day, all kinds.

Ohio study, salary of driver: Driver of wagon $90 per month. Driver of automobile $120 per month. Give considerable weight to local opinion as to cost of driver on the ground.

Number of Pupils per Truck.—Hard road, 20 to 40 or 50 according to size of truck. Wagon on dirt road, maximum number 24.

Family transportation to automobile or schoolhouse, maximum $20 per month.

Board in lieu of transportation, $3.50 to $5.00 per week.

Other Expenses of Instruction.[1] —Elementary schools: $26 per teacher, $0.78 per pupil.

Secondary schools: Academic, $47.20 per teacher, $4.25 per pupil.

Academic and vocational combined, $84.40 per teacher, $13.68 per pupil.

Operation and Maintenance.[1] —Janitor, $64 per teacher, $2.80 per pupil.

Other operating costs, $120.08 per teacher, $5.26 per pupil.

Maintenance, $34.06 per teacher, $1.49 per pupil.

Transportation, $180.70 per teacher, $7.91 per pupil (of secondary importance).

Other auxiliary agencies, $19.25 per teacher, $0.84 per pupil.

Fixed charges $22.93 per teacher, or $1.00 per pupil (of secondary importance).

General control, $1.00 per pupil.

Additional instruction and standards were prepared after the field work had been entered upon. These were as follows:

1. Instead of dividing all schools into elementary schools and high schools it seems best, in some cases at least, to provide for the financing of junior high schools. Some of these junior high schools may not have a senior high school above them. In other communities the junior and senior high schools may be combined into one. Each field worker is to use his own judgment as to the best type of school to have established in each community. Each field

[1] Based on costs in seven consolidated districts in New York State in which academic departments teaching agriculture and home economics were maintained, 1919–1920.

worker should, in the course of his work, furnish an example of each of the three types of high schools—junior high schools only, junior and senior high schools combined, and the regular four-year high school.

2. In consequence of what is outlined in No. 1 above there is provided on the blank forms, paragraph 4, three columns at the heads of which the grades covered in each case are to be filled in by the field worker. (See page 170.)

3. Standards in junior high schools: Minimum number of teachers, 3.

Minimum number of pupils per teacher, 20.

Salaries of teacher of agriculture and principal, $1,500.

Salary of teacher of home-making, $1,000.

Salary of teacher of academic subjects, $900.

It is expected that the first two teachers will each do some academic work.

4. Bonds—standards:

(*a*) Bonds issued for purchase of site, schoolhouse, etc., twenty-year period, one-twentieth retired the first year, interest five and one-half percent on the total issue should be paid during the first year.

(*b*) Notes issued for purchase of trucks and wagons, five-year period, one-fifth retired the first year, interest six per cent. Interest paid first year on total issue.

Methods of Work.—The methods observed by the field workers in the estimation of costs have been described by the same member of the staff quoted above, in the following words:[1]

"Average attendance figures were usually used to determine the number of children to be housed and transported, but in some cases a median between total enrolment and average attendance was substituted.

"The kind of conveyance to be used and the annual wage of the driver were both based upon the kind of conveyance now in use in nearby districts and the annual cost for the same.

"Usually the conveyances in use were privately owned. Hence

[1] Mr. Bock's entire article will be published in Schoolmen's Week Proceedings, 1922, University of Pennsylvania Bulletin.

this practice was followed in the reorganization projects with this exception—that in each project requiring more than one conveyance, provision was made for the purchase of one modern school wagon or truck by the district, the first year.

"In working out transportation routes, as was done in practically every case, pupils were obliged to walk to a main road to meet the conveyance only when it was noted that during inclement weather a dwelling house offered shelter near the meeting point.

"The items dealing with assessments require some explanation. As noted above, the assessment is made by a local board of assessors, and, as in Pennsylvania, is usually not full value assessment.

"The State Equalization Board, or Tax Commission, a permanent body of taxation experts on full time service, annually compares current sales of property with local assessed values. Then they give each township an assessment rating based upon these sales as 70 percent, 82 percent, etc. These ratings, published annually in book form, indicate the percentage of its true value at which property is locally assessed. Hence, when the local assessed valuations had been obtained from the district superintendent's report, the true valuation and true tax-rate for each district could be readily computed. This true tax-rate, being on a 100 percent valuation makes a reasonably fair basis of comparison between the several districts.

"On the basis of the sum of the true valuations of all the districts involved in a reorganized project, and the total annual expenditures of the same districts, minus the state aid, the surveyor computed what would have been the cost and the true tax-rate for operating the existing schools as they were during 1919–1920, provided the territory in the project had been reorganized into the proposed larger administrative units.

"Upon these facts as a basis, it was believed that the farmers of the State could form a sound judgment as to whether the existing organization of school districts in the State should be modified. Such reorganization was found to raise the tax-rate in some districts and lower the rate in others."

"Standards for determining costs were agreed to but were subject to some modifications by reason of local conditions.

"The schoolhouses suggested were of such pretentiousness only as the best thought of the local community would be likely to approve. Inasmuch as rural schoolhouses in New York State are somewhat smaller than usual, and are usually of frame construction, the standard of prices may seem somewhat low."

It should be noticed that in the use of the blanks, costs of elementary and secondary schools are kept separate throughout; that to the total of current expenses is added the debt service giving the total amount to be raised the first year; that from this is deducted the state aid giving the net amount to be raised by local tax; and that the items at the close furnish costs in terms of actual and true tax-rates.

As the "project blanks" were completed by the surveyor, while in the field, they were sent to the office of the Director of the Financial Section where they were checked for accuracy of computation. They were then studied comparatively by the Director and where it seemed that one surveyor was extreme in his estimation of costs the proper revision was made by the surveyor, not only in his costs, but also in the amount of the tax-rates at the end of the "project blank."

Tabulation of Data

In order to put the data in such form as would enable the Survey to make a study of the costs thus ascertained, the most important items contained in the "project blank" were tabulated on large "project tables." The headings of the various columns in these "project tables" are as follows:

Name of project.
Equalized valuation.
Equalized valuation per teacher.
Present No. teachers. Reorganized No.
Salaries:
  Elementary—
    Amount No. teachers.
  Secondary—
    Amount No. teachers.
  Vocational—
    Amount No. teachers.
Transportation
  No. pupils transported.
Other expenses.

Debt service.
Total expenses.
Total payments.
Equalized tax without state aid.
  For current expenses.
  For transportation.
  For debt service.
Present plan—
  Total cost.
Present state aid.
Equalized tax without state aid.
Equalized tax rate with state aid.

The data called for under the above headings, which were not furnished by the "project blanks," were gathered from other sources or were computed from data contained therein. Undoubtedly the most painstaking work required of the Survey was spent in the preparation of these "project tables." Every "project" was first worked out separately and afterwards combined. The wide range of the data thus brought together made it possible to inquire into a vast number of relationships, but because of lack of space, only those brought out in succeeding chapters can be entered upon here.

CHAPTER XIII

COMPARISON OF COSTS, STATE AID AND TAX-RATES UNDER PRESENT AND PROPOSED PLANS

THE "project table" described in Chapter XII provided the material from which deductions could be made as to comparative costs of schools under varying conditions as well as to the effects of the plan of state aid recommended in Chapter X. Inasmuch as the Joint Committee on Rural Schools had virtually decided to accept the community unit for the purpose of taxation by the time this work was finished, it seemed desirable to make comparison of costs under each of the following sets of conditions.

1. Costs of schools in community districts maintaining the same schools as at present and continuing the present system of state aid. (Law of 1920.)

2. Costs of schools in community districts maintaining the same schools as at present but with the revised form of aid recommended in Chapter X.

3. Cost of schools completely reorganized into community districts in accordance with the plans of the field workers of the Financial Section of the Survey and with the revised form of state aid recommended in Chapter X.

That which follows will describe the way in which the material furnished by the "project table" was utilized.

The first step was to combine the "projects" or school centers into "community districts." In doing this, effort was made to keep the number of community districts as close to the number of towns as conditions permitted on the ground that inasmuch as the people of New York State had become accustomed to conducting

their civil affairs in towns, a territory of similar size might best be adapted to community districts. However, this principle was not followed whenever it seemed to the best interest of the schools not to do so. Town lines were totally disregarded in the making up of community districts. Table 50 gives a list of these fictitious community districts together with a description of the "projects" that comprise them. District lines were disregarded in the making up of "projects" whenever it seemed advantageous to the pupils to do so.[1]

It will be noticed that there is considerable variety in the type of schools demanded, in the number of pupils and teachers, and also in the number of combined districts and equalized valuations. The Survey Staff believes this is inevitable. This fact has an important bearing upon comparative costs; but the plans for state aid herewith recommended takes away most, if not all, of the practical difficulties that would otherwise arise, since it adjusts itself so readily and so completely to the needs of the respective districts, stimulating them to their best efforts and complementing them in such a way that an efficient school is possible without undue strain upon the local tax-payers.

The expense of conducting the schools now situated in each of these community districts as well as of the reorganized schools as arranged by the Survey Staff is given in Table 51. The significant point in this table is the increased cost of the reorganized schools. These increases range all the way from one to seventy-seven percent., the lowest increases, on the whole, being in Monroe County, the highest in Delaware County. The median increase is approximately thirty-five percent. From this it may be concluded that it will cost the local and the state governments together practically one-third more to run a first-class system of rural schools than to conduct the present system. In this connection it should be

[1] It should be said that while this organization of projects in community districts was done with great care, the time at the disposal of the committee was not sufficient to warrant the adoption of such distribution of territory as that which should be followed if the community districts were established by law. It is believed, however, to be sufficiently close to the form of organization to be adopted to furnish reliable material for valid conclusions regarding the costs of schools and the operation of the plan of state aid recommended herein.

TABLE 50.—LIST AND DESCRIPTION OF TYPICAL PROJECTS IN DELAWARE, MONROE AND TOMPKINS COUNTIES

Town	School	Number of districts combined	Number of pupils	Number of teachers					Total equalized valuation
				Present	Reorganized				
					Elem.	Sec.	Vocational	Total	
Delaware Supervisory District No. 1									
Sidney Center	Junior High	6	146	6	3	3	..	6	$874,155
Masonville	Junior High	8	146	9	5	3	..	8	501,740
"	Academic High	7	146	6	3	3	..	6	420,479
Tompkins	Junior High	6	118	7	2	1	..	3	444,145
"	Junior High	5	170	6	4	2	1	7	491,376
Delaware Supervisory District No. 2									
Colchester	Vocational High	14	365	16	12	6	2	20	1,527,340
"	Junior High	6	110	6	1	1	1	3	686,700
Hancock	Vocational High	6	435	10	12	5	2	19	2,137,521
"	Junior High	10	182	11	5	3	2	10	1,285,048
"	Junior High Academy	6	112	8	4	2	..	6	657,496
"	Junior High Academy	7	115	8	3	2	..	5	1,033,736
Delaware Supervisory District No. 3									
Walton	Acad. Vocational High	18	1006	47	25	20	..	45	7,008,798
Hamden	Jr. High, Vocational	6	144	7	3	2	1	6	891,520
Delhi	Academy Vocational	17	690	35	13	12	..	25	2,807,193

TABLE 50.—LIST AND DESCRIPTION OF TYPICAL PROJECTS IN DELAWARE, MONROE AND TOMPKINS COUNTIES—(*Continued*)

Town	School	Number of districts combined	Number of pupils	Number of teachers					Total equalized valuation
				Present	Reorganized				
					Elem.	Sec.	Vocational	Total	
Delaware Supervisory District No. 3									
Franklin	Academic High	14	362	3	4	3	..	7	$2,175,859
"	Elementary	2	21	2	1	..	..	1	191,718
"	Elementary	3	12	2	1	..	..	1	218 736
"	Junior High	7	58	4	2	2	1	5	806,492
"	Elementary	4	42	4	2	..	..	2	312,497
Meredith	Junior High	5	118	6	3	1	1	5	541,626
"	Elementary	3	30	3	2	..	..	2	300,135
Davenport	Elementary	2	23	2	1	..	..	1	327,330
"	Jr. and Sr. High Voc.	8	132	5	3	3	2	8	662,359
"	Elementary	2	20	2	1	..	..	1	202,434
"	Elementary	2	25	2	1	..	..	1	307,575
Delaware Supervisory District No. 6									
Stamford	Academic High	7	218	14	6	3	..	9	1,937,122
"	Elementary	2	23	2	1	..	..	1	236,718
Harpersfi'd	Elementary	5	39	4	2	..	..	2	318,144
"	Academic High	7	277	15	8	5	..	13	2,619,982
Kortright	Elementary	5½	64	6	3	..	..	3	349,719
"	Junior High Academic	8	107	9	3	3	..	6	776,557
"	Elementary	4	30	4	3	..	..	3	212,229
Bovina	Elementary	2	9	2	1	..	..	1	160,546
"	Academic High	9	119	10	4	4	..	8	1,041,995

Monroe County Supervisory Districts Nos. 1, 2, 3, 4									
Henrietta	Vocational High	6	242	9	8	2	2	12	1,944,439
"	Elementary	4	141	5	4	..	1	5	1,712,609
Mendon	Academic High	5	391	18	8	4	..	12	2,595,970
"	Junior High	6	112	7	3	2	1	6	831,284
"	Elementary	3	92	3	3	..	..	3	263,628
Ogden	Jr. High, Acad. and Voc.	7	387	20	10	8	2	20	3,124,755
Tompkins Supervisory District No. 1									
Newfield	Academy Voc. High	9	192	13	4	1	2	7	623,092
"	Elementary	6	319	6	3	..	..	3	579,574
"	Elementary	2	23	2	1	..	..	1	125,222
Enfield	Vocational High	10	129	10	4	..	1	5	707,115
Ulysses	Elementary	4	65	4	2	..	..	2	465,410
"	Academic Vocational	13	390	14	8	4	2	14	2,083,023
Tompkins Supervisory District No. 3									
Danby	Elementary	8	141	8	5	..	..	5	652,989
"	Elementary	6	86	7	3	..	..	3	579,574
Caroline	Elementary	5	111	5	4	..	..	4	424,504
"	Elementary	3	95	4	3	..	..	3	324,450
Dryden	Elementary	3	44	3	2	..	..	2	296,162
"	Elementary	2	17	2	1	..	..	1	156,825
"	Academic Vocational	6	162	12	6	3	2	11	1,144,525
"	Elementary	3	151	8	5	1	..	5	612,938
"	Elementary	2	28	2	1	..	..	1	104,120
"	Elementary	2	35	2	1	..	..	1	152,455

remembered that the wastes and inefficiencies in the present system have been removed to a considerable degree in the reorganized plan, and that the gain in actual efficiency would probably be far greater than the increase in the costs.

TABLE 51.—COMPARISON OF EXPENSES, IN COMMUNITY DISTRICTS—(1) WITH SCHOOLS AS NOW ORGANIZED; (2) WITH REORGANIZED COMMUNITY SCHOOLS; (3) PERCENT OF INCREASE

	1	2	3
Delaware County			
Supervisory District No. 1			
Sidney Center	$7,953	$11,449	43.7
Masonville	19,359	21,085	8.9
Tompkins	16,463	18,468	12.5
Supervisory District No. 2			
Colchester	35,459	54,398	53.5
Hancock	49,600	65,734	32.5
Supervisory District No. 3			
Delhi	45,089	50,594	12.2
Walton	78,722	99,961	26.9
Hamden	10,123	13,724	35.5
Supervisory District No. 5			
Franklin	26,454	35,826	35.4
Davenport	16,333	22,428	37.3
Meredith	10,150	17,870	76.05
Supervisory District No. 6			
Stamford	22,196	19,856	..
Harpersfield	22,322	30,126	35.5
Kortright	19,053	24,677	29.5
Bovina	11,350	16,664	46.8
Tompkins County			
Supervisory District No. 1			
Newfield	22,208	30,003	35.5
Enfield	7,925	11,885	49.9
Ulysses	29,892	28,535	..
Supervisory District No. 3			
Danby	18,314	21,756	18.7
Caroline	15,913	21,672	36.1
Dryden	31,146	39,186	25.8
Monroe County			
Supervisory District No. 1			
Henrietta	19,605	29,600	50.9
Supervisory District No. 2			
Mendon	37,680	38,907	3.2
Supervisory District No. 3			
Parma	33,725	33,934	.61
Supervisory District No. 4			
Ogden	39,852	46,326	16.6

Another significant conclusion is that an increase of over one-third in the costs of schools in rural communities could not possibly be borne by them alone; if rural New York ever has the educational system it should have, it must be with the assistance of the State as a whole.

Before showing in detail just how the plans recommended in Chapter X work out in the 22 community districts here presented it is desirable again to point out the fact that the fundamental purpose is to equalize local tax-rates in all classes of districts for the same types of schools irrespective of valuations. While there will be differences in the tax-rates due not only to the efforts that districts make to maintain the most efficient schools but also to failures to come up to certain standards for which penalties are exacted, yet there will be a very strong tendency to have local tax-rates throughout the entire State approach the median. It is estimated that this median point for local tax-rates, after state aid has been deducted under the plans proposed herewith, will be near five or five and one-half mills as long as the percent scale of expenses is maintained. It is important in judging the effect of this proposed plan of state aid that this probable median be kept in mind; also the further fact that the taxes of districts other than common school districts will be reduced by larger amounts of state aid. Moreover, it should be pointed out, in this connection that this does not necessarily imply an increased cost of schools to the state government. New York through its central government already bears a fair share of the expenses of schools. The difficulty is that this central aid is not efficiently distributed under the present district and teacher quota systems.

Table 52 gives the essential facts from the "project tables" which make possible an analysis of the relationship between state aid and total expenses and the costs of the building and vehicles which would be required in order to put reorganized schools into effect. It will be noticed that there is a wide range in the proportion of state aid varying from eighteen to seventy-five percent, the median percent being about fifty-seven. This seems to be a large proportion at first glance. It should be remembered in the first place, however, that these figures include both General Aid and all forms

TABLE 52.—ANALYSIS OF VALUATIONS, EXPENSES AND STATE SUPPORT IN THE REORGANIZED COMMUNITY DISTRICTS

	Number of teachers	True valuation per teacher	Total expenses	State aid for expenses	Percent of total	Local tax-rate	Cost of buildings and vehicles	State aid buildings and vehicles
Delaware County								
Supervisory District No. 1								
Sidney Center	8	$147,200	$11,449	$5,680	49	4.94	$13,500	$2,700
Masonville	13	77,400	21,085	15,870	75	5.17	63,500	15,875
Tompkins	11	99,500	18,468	12,570	68	5.38	35,500	8,875
Supervisory District No. 2								
Colchester	34	86,500	54,398	37,926	69	5.62	99,000	24,750
Hancock	42	131,000	65,734	35,436	54	5.51	160,000	32,000
Supervisory District No. 3								
Delhi	28	108,200	50,594	32,350	64	6.02	159,000	31,800
Walton	54	154,100	99,961	42,090	42	6.95	112,500	16,875
Hamden	8	124,773	13,724	8,066	59	5.70	28,500	5,700
Supervisory District No. 5								
Franklin	16	252,919	35,826	6,024	17	7.36	30,000	1,500
Davenport	12	129,975	22,428	14,180	63	5.80	24,000	4,800
Meredith	7	120,252	17,870	11,620	65	7.42	84,000	1,680
Supervisory District No. 6								
Stamford	10	217,384	19,856	3,699	18	7.42	37,000	3,700
Harpersfield	15	195,864	30,126	12,410	41	5.84	27,500	4,125
Kortright	12	111,500	24,677	15,970	65	6.50	28,500	5,700
Bovina	9	133,615	16,645	9,760	59	5.72	20,500	4,100
Tompkins County								
Supervisory District No. 1								
Newfield	14	103,644	30,003	20,983	69	6.21	41,000	8,200
Enfield	5	143,403	11,885	7,490	63	6.14	31,000	6,200
Ulysses	15	203,038	28,535	8,506	26	6.57	36,000	3,600

Supervisory District No. 3								
Danby	11	121,979	21,756	13,840	63	5.95	29,500	5,900
Caroline	16	75,974	21,672	14,630	67	5.86	26,000	6,500
Dryden	26	118,173	39,186	22,730	58	5.37	46,500	9,300
Monroe County								
Supervisory District No. 1								
Henrietta	16	228,100	29,600	4,502	58	6.86	48,250	4,820
Supervisory District No. 2								
Mendon	22	179,696	38,907	13,570	35	6.42	48,000	7,200
Supervisory District No. 3								
Parma	19	247,690	33,934	4,448	13	6.18	80,000	8,000
Supervisory District No. 4								
Ogden	30	161,584	46,326	18,270	39	5.90	114,000	17,100

of Special Aid; also that the average equalized valuation per teacher of the entire State is $240,000, and that there are but two districts in this table which have a higher valuation per teacher. Each of these has but a small proportion of state aid. It will be observed, by comparing further the percents of state aid, or proportions of expense paid by the state, and the equalized valuations per teacher, that in general they vary inversely with each other. The correlation coefficient computed according to Spearman's Method of Rank Differences is unusually high, $r = -.936$. Table 53 shows the rank of each community district in each of these respects.

In connection with outlays it will be observed that the costs of the building "projects" in the various districts differ considerably. This is due to the differences in the size and condition of the present school plants, to the type and size of the community schools, and to the different conceptions which people living in different portions of the State have regarding the kind of school building that should be erected. For instance, in Monroe County people insist that only modern fully fireproof buildings shall be erected, while in Delaware County semi-fireproof buildings are the most expensive that are considered. Another

factor causing differences in the initial cost of the additional school plant, is the number of children to be transported and the character of equipment provided for that purpose. It will be noticed the amount of transportation aid varies inversely to the equalized valuation per teacher in accordance with the provision for state aid given above.

TABLE 53.—RELATIONSHIP BETWEEN PERCENT OF TOTAL EXPENSE MET BY STATE SUPPORT AND EQUALIZED VALUATION PER TEACHER[1]

Town	Rank in percent of total expense met by State aid	Rank in equalized valuation per teacher
Stamford	1	22
Ulysses	2	21
Mendon	3	19
Ogden	4	18
Harpersfield	5	20
Walton	6	17
Sidney Center	7	16
Hancock	8	13
Henrietta	9	23
Dryden	10	8
Hamden	11	11
Bovina	12	14
Davenport	13	12
Enfield	14	15
Danby	15	10
Delhi	16	6
Meredith	17	9
Kortright	18	7
Caroline	19	1
Tompkins	20	4
Colchester	21	3
Newfield	22	5
Masonville	23	2

$r = -.936$

As regards the local tax-rates for expenses as given in this table, it should be mentioned in the first place that these are equalized tax-rates and that on the whole they were found, in the Chapter on Valuations, to average about sixty percent of the actual tax-rates based upon assessed valuations. Thus, a six percent tax in this table represents a ten percent tax as generally levied. In the second place it will be noticed that none of these local tax-rates

[1] Spearman's Method of Rank Differences.

fall below five nor reach as high as seven and one-half mills. All of them lie close together and near or just above the probable median local tax-rate for the entire State. This demonstrates the fact that the plan proposed in the previous chapter tends to equalize the local tax-rates.

Table 54 furnishes a percentage analysis of state aid for expenses given in Table 52. Considerable variety in the percentages among the various community districts is noticeable in all types of aid. General Aid ranges from twenty-five to seventy-eight percent, transportation from five to thirty-six percent, secondary teachers from one to sixteen percent, agricultural and home economics from five to thirty-five percent, abandoned buildings from four to twenty-two percent. The medians are approximately sixty percent for General Aid, sixteen for transportation aid, nine for agricultural and home economics, ten for abandoned buildings and six for high schools. Again the general indirect correspondence between General Aid and equalized valuation per teacher is noticeable.

The most important comparison for practical purposes is that between the local tax-rates under the various systems of organization and state aid. Any citizen may properly wish to know how this reorganization plan would effect him. Table 55 is planned to answer this question with three different sets of actual conditions in mind. The three situations set out at the beginning of this chapter are covered in the columns numbered 1, 2, 3a and 3b. The tax-rates in Column 1 have been computed on the assumption that the expenses in each of the districts included would be the same in the year 1920–21 as in the year 1919–20 except for the increases in salaries, the amounts of which increases were ascertained from the State Commissioner of Education. From these expenses was deducted the amount of aid that was distributed to the districts in May, 1921. The remainder was divided by the equalized valuation of the district in question. These figures are, therefore, believed to be reliable. It will be noticed that they are lower than the tax-rates of these districts during the previous year as given in Chapter VI on Tax-Rates. This is due to the increased aid given by the State during the year 1920–21.

Column 2 gives the tax-rates under the following conditions: The

TABLE 54.—PERCENTAGE ANALYSIS OF STATE SUPPORT IN THE REORGANIZED COMMUNITY DISTRICTS

	True valuation per teacher	Total aid for expenses	General		Transportation		Secondary		A. & H. E.		Abandoned building	
			Amt.	Percent	Amt.	Percent	Amt.	Percent	Amt.	Percent	Amt.	Percent
Delaware County												
Supervisory District No. 1												
Sidney Center	$147,200	$5,680	$3,680	65	$800	14	$600	10	..	..	$600	11
Masonville	77,400	15,870	10,950	63	2,920	20	800	8	..	..	1,200	9
Tompkins	99,500	12,570	8,300	67	2,110	17	500	4	666	5	1,000	7
Supervisory District No. 2												
Colchester	86,500	37,926	26,800	70	6,660	17	1,400	4	1,666	5	1,400	4
Hancock	131,000	35,436	22,800	64	5,070	14	2,400	7	2,166	7	3,000	8
Supervisory District No. 3												
Delhi	108,200	32,350	23,650	73	4,700	14	2,400	8	..	..	1,600	5
Walton	154,100	42,090	32,300	77	4,090	10	4,000	9	..	..	1,700	4
Hamden	124,773	8,066	5,260	65	1,240	16	400	5	666	8	500	6
Supervisory District No. 5												
Franklin	252,919	6,024	960	16	164	2	1,000	17	1,000	17	2,900	48
Davenport	124,975	14,180	7,300	52	3,680	26	600	4	1,800	12	800	6
Meredith	120,252	11,620	5,340	46	4,180	36	400	3	1,000	9	700	6
Supervisory District No. 6												
Stamford	217,384	3,699	1,705	47	594	15	600	16	..	..	800	22
Harpersfield	195,864	12,410	7,540	61	2,770	22	1,000	8	..	..	1,100	9
Kortright	111,500	15,970	7,550	48	5,820	36	600	4	..	..	2,000	12
Bovina	133,615	9,760	5,500	56	2,460	25	800	8	..	..	1,000	11

Tompkins County												
Supervisory District No. 1												
Newfield	103,644	20,983	11,900	57	5,550	27	200	1	1,733	8	1,600	7
Enfield	143,403	7,490	2,980	40	2,410	33	200	2	1,000	13	900	12
Ulysses	203,038	8,506	3,640	43	466	5	800	9	2,000	24	1,600	19
Supervisory District No. 3												
Danby	121,979	13,840	7,720	56	4,620	34	200	1	..	..	1,300	9
Caroline	75,974	14,630	11,420	78	2,510	17	..	..	..	..	700	5
Dryden	118,173	22,730	15,650	69	2,330	10	800	4	1,650	7	2,300	10
Monroe County												
Supervisory District No. 1												
Henrietta	228,100	4,502	1,315	29	337	7	400	9	1,550	35	900	20
Supervisory District No. 2												
Mendon	179,696	16,200	8,100	50	4,050	25	1,200	8	1,550	9	1,300	8
Supervisory District No. 3												
Parma	247,690	34,448	988	22	60	1	1,200	27	1,800	41	400	9
Supervisory District No. 4												
Ogden	161,586	18,270	13,000	71	1,470	8	1,600	9	1,600	9	600	3

same costs of schools as in the case of Column 1 but with state aid according to the plan submitted in Chapter X. The Columns, 3a and 3b of Table 55 deal with the reorganized school system under the revised plan of state aid as herein proposed. Column 3a shows the tax-rate for expenses in each district while Column 3b shows the total tax-rate including that for outlays and debt service for the first year of the operation of the new schools. The difference between the two columns shows the amount of tax that it would be necessary to levy for the first year in order to meet the building and vehicle outlay. Ordinarily this amount should gradually grow less during a twenty year period. This difference between the two columns is shown in the last column.

Many of these tax-rates shown in Column 2, Table 55, would have been lower had it not been for the fact that deductions were made because of small attended schools. The Survey did not attempt to deduct for

teachers of low qualifications or to add for teachers of high qualifications. This feature of deductions in the plan of state aid is

TABLE 55.—COMPARISON OF TAX-RATES IN COMMUNITY DISTRICTS: (1) WITH SCHOOLS AS NOW ORGANIZED AND PRESENT AID; (2) WITH SCHOOLS AS ORGANIZED AND PROPOSED REVISED AID; (3) WITH REORGANIZED COMMUNITY SCHOOLS AND PROPOSED REVISED STATE AID; (a) CURRENT EXPENSES ONLY; (b) CURRENT EXPENSES, NEW BUILDINGS, TRANSPORTATION EQUIPMENT AND (4) DIFFERENCES BETWEEN 3A AND 3B

	1	2	3 (a)	3 (b)	4
Delaware County					
Supervisory District No. 1					
Sidney Center	$3.81	$4.57	$4.64	$5.40	$0.46
Masonville	11.10	6.60	5.17	7.43	2.26
Tompkins	8.78	6.60	5.38	6.59	1.21
Supervisory District No. 2					
Colchester	6.50	5.42	5.62	6.88	1.26
Hancock	4.70	5.78	5.51	6.67	1.16
Supervisory District No. 3					
Delhi	9.54	7.10	6.02	7.98	1.96
Walton	6.58	6.80	6.95	7.51	.56
Hamden	5.71	5.12	5.70	6.84	1.14
Supervisory District No. 5					
Franklin	4.04	5.66	7.36	7.67	.31
Davenport	6.16	6.84	5.80	6.40	.60
Meredith	7.72	6.15	7.42	7.79	.37
Supervisory District No. 6					
Stamford	7.01	6.04	7.42	8.10	.68
Harpersfield	5.70	5.05	5.84	6.24	.40
Kortright	8.06	5.68	6.50	7.30	.80
Bovina	5.30	5.13	5.72	6.40	.68
Tompkins County					
Supervisory District No. 1					
Newfield	9.00	3.87	6.21	7.27	1.06
Enfield	4.85	3.99	6.14	7.83	1.69
Ulysses	7.62	6.74	6.57	7.01	.44
Supervisory District No. 3					
Danby	8.20	4.00	5.95	6.79	.84
Caroline	6.45	3.87	5.86	6.67	.81
Dryden	8.35	3.89	5.37	5.94	.57
Monroe County					
Supervisory District No. 1					
Henrietta	4.01	4.10	6.86	7.49	.63
Supervisory District No. 2					
Mendon	6.92	5.63	6.42	6.94	.52
Supervisory District No. 3					
Parma	5.49	5.45	6.18	6.93	.75
Supervisory District No. 4					
Ogden	6.05	5.55	5.90	6.65	.75

well illustrated by this one example. The following table, Table 56, shows the amounts that were deducted from the various districts as well as the tax-rates that might have been levied had their

TABLE 56.—COMPARISON OF THE REORGANIZED COMMUNITY DISTRICTS ON THE BASIS OF (1) DEDUCTION FOR LOW ATTENDANCE, (2) TAX-RATE WITHOUT THIS DEDUCTION, (3) TAX-RATES WITH THIS DEDUCTION, (4) DIFFERENCES BETWEEN TAX-RATES (3) AND (4)

Districts	1	2	3	4
Delaware County				
Supervisory District No. 1				
Sidney Center	$1,380	3.86	4.57	.71
Masonville	..	4.04	6.60	2.56
Tompkins	6,140	4.76	6.60	1.84
Supervisory District No. 2				
Colchester	8,730	4.30	5.43	1.13
Hancock	7,440	5.02	5.78	.76
Supervisory District No. 3				
Delhi	11,600	4.70	7.10	2.40
Walton	1,160	6.65	6.80	.15
Hamden	2,570	4.06	5.12	1.06
Supervisory District No. 4				
Franklin	2,800	5.04	5.66	.62
Davenport	3,320	5.58	6.84	1.26
Meredith	3,540	4.50	6.15	1.65
Supervisory District No. 5				
Stamford	1,575	5.62	6.04	.42
Harpersfield	1,700	4.62	5.05	.43
Kortright	7,500	4.05	5.68	1.63
Bovina	4,240	3.66	5.13	1.47
Tompkins County				
Supervisory District No. 1				
Newfield	1,200	3.62	3.87	.25
Enfield	1,815	3.23	3.99	.76
Ulysses	600	6.74	6.74	..
Supervisory District No. 2				
Danby	2,630	4.20	4.80	.60
Caroline	835	3.70	3.87	.17
Dryden	1,900	3.61	3.89	.28
Monroe County				
Supervisory District No. 1				
Henrietta	240	4.05	4.10	.05
Supervisory District No. 2				
Mendon	1,135	5.54	5.63	.09
Supervisory District No. 3				
Parma	..	5.45	5.45	..
Supervisory District No. 4				
Ogden	7,450	5.44	5.55	.11

schools been organized on an efficient basis. The differences between the tax-rates are given in the fourth column.

This table proves that the revised plan of state aid proposed herein makes it possible for the rural school districts throughout the State to maintain efficient schools upon the levying of a reasonable tax-rate, the same being true for urban districts as well. On the other hand, the amount of proposed state aid is not so great as to give a local district any feeling that it can conduct its schools largely upon state money, because while there are no high tax-rates, there are at the same time no low tax-rates. All the tax-rates in this table are near or slightly above the probable median. This is entirely right in view of the fact that new systems of schools are being installed and that initial expenses must be met.

It is believed that this is a very satisfactory situation for the schools of any state. The State under such circumstances as these would not act, on the one hand, as an almoner for districts of little wealth or of little interest in schools by giving them too much, but, on the contrary, would help many districts to exert their best efforts toward maintaining, by the levying of a reasonable tax, schools equal in efficiency to any other school in the State. Such a system of state financing of schools should be full of significance for the future happiness and welfare of any state because it develops a higher scale of intelligence among its future citizens.

The desirability of the establishment of a system of aid such as this seems to be warranted by the facts presented in this chapter. The question that remains is whether the central government can afford to grant the aid required. The State's ability to perform this function will be discussed in full in the next chapter, Chapter XIV.

CHAPTER XIV

THE PRACTICABILITY OF THE PLAN

IN THE chapters which have preceded the following essential points bearing upon central or state support of local schools have been established:[1]

1. That there is great variation in the ability of all classes of districts, common school, union free, villages and cities to support schools as revealed by their equalized valuations per teacher.

2. That there are great differences in the efforts made by these districts to support schools as revealed by their equalized tax-rates.

3. That some common school and union free school districts have so little taxable property that it is impossible for them to support efficient schools without large amounts of state aid.

4. That the present system of state aid does not give sufficient funds to enable the low-valuation districts to support efficient schools upon a reasonable tax.

5. That the present system of General Aid does not do as much in proportion to their needs for the lowest valuation one-teacher districts as for the higher-valuation districts.

6. That the present system of General Aid to union free school districts, villages and cities totally disregards the relative ability of school districts to support schools.

7. That the present system of General Aid to all classes of districts totally disregards the efforts which districts make to support schools.

8. That there are a number of states having systems of General Aid which take into account either the ability of the districts to support schools or the effort they make, but that there are few states which take both of these factors into account.

9. That practically all plans for apportionment of General Aid

[1] See Chapter VII for summary of findings relative to local finances.

do not respond either quickly or precisely to changes in either of these factors.

10. That it is possible to create a plan which will take into account both of these factors and which will respond promptly and accurately to alterations either in ability to support schools or in effort to support efficient schools as shown by valuations and tax-rates.

11. That such a plan may be outlined in sufficiently simple form to make it practicable.

12. That the method involved in such a plan may be used in connection with varying standards and that these may be adjusted to varying educational and economic conditions.

13. That certain forms of Special Aid should be abandoned because while at the beginning they served as a reward for meritorious action out of the ordinary, the practice has since become common throughout the State. Other forms of Special Aid have been retained because they still accomplish this purpose.

14. That certain new forms of Special Aid should be adopted in order to encourage new undertakings. Among those applicable to rural schools are Special Aid (*a*) for the erection of new buildings, (*b*) for the purchase of vehicles for transportation purposes, (*c*) for payment of expenses for transportation, (*d*) for abandonment of certain school buildings now used, and (*e*) for employment of additional high school teachers.

15. That an efficient rural school system for the State of New York will require a 24 percent increase in expenses due to expansion in scope and increased efficiency in personnel, course of study, methods of teaching and supplies and equipment.

16. That rural communities without certain inducements from the State will not consent to the reorganization of their schools; and that it is to the interest of the State that it offer such inducements.

17. That the costs of reorganized schools conducted on a plan of efficiency comparable to that upon which city schools are now conducted, can be borne by the rural schools as easily as city schools now bear their burdens when assisted by the proposed plan of state aid; and this can be done without large increases in the local tax-rates.

Ability of State to Adopt Plan

It remains now to consider whether the central or state treasury should bear such a proportion of the total expenses of local schools as is required by the recommendations of the author. In order to answer this question estimates have been carefully made of the appropriations that would be required in order to comply with the terms outlined under the various plans proposed in Chapters X and XI. These estimates are based upon data furnished in Chapters V, VI and XIII and by the State Department of Education. These estimates for the first year of the operation of the new plan are as follows:

(A) General Aid (based on data for 1920)		
1. Required for Form I.		
Towns	$11,302,410	
Villages	1,071,631	
Cities	4,568,318	
Total		$16,942,359
2. Additional amount required for Form II.		
Villages	$35,871	
Cities	601,592	
Total		637,463
3. Additional amount required for Form III		12,989,434
4. Total amount required Form II (sum of 1 and 2)		17,579,822
5. Total amount required Form III (sum of 1 and 3)		29,931,793
6. Total amount required Form IV (sum of 1, 2 and 3)		30,569,256
(B) Special Aid		
Home economic teachers	$593,143	
Teachers of physical training	328,339	
Supervisory quota	142,860	
High school teachers	400,000	
Transportation	310,000	
Normal school graduates in rural schools	50,000	
Abandoned buildings	75,000	
Total		1,899,342
(C) Total General Aid for Form IV and Special Aid combined		32,468,598

It was assumed in making these calculations for Form I that the median equalized tax-rate in the towns under the reorganized plan would be five and one-half mills, and that the valuations were the

same as the combined distribution of valuations in union free and common school districts as given in Chapter V. Each village under a superintendent and city was worked out separately according to the tax-rates and valuations as reported for the year 1920. The same holds true for villages and cities in the estimation of the additional amount required for Form II.

It will be observed from a study of these figures that an appropriation of approximately $20,000,000 (amount of General Aid required for Form II plus the amount required for all forms of Special Aid) will be sufficient in the State of New York at the present time to suit the requirements of the plan of state aid recommended in this study without deductions for schools of low attendance or other reasons. These deductions it is believed will be sufficient to off-set, for a period of years, any increase in General Aid due to increased costs of local schools. Above this amount of $20,000,000 the State may add General Aid in any amount it pleases provided it is raised and distributed on a basis of equalized valuations without doing violence to the principles of state aid recommended in this report. The above figures include the distribution of the proceeds of the State one mill tax now levied for schools. (Additional aid required for Form III and IV.)

The consideration of whether New York can afford to grant these amounts of central support can be approached from only two points of view, since obviously the present tax system of the State cannot be brought into a study limited to the finances of the schools—(1) the present scale of expenditures, and (2) a comparison with expenditures and wealth of other states.

The appropriation for common schools, which covers the district and teacher quotas, was in 1921, $32,900,000, and in 1922, $35,065,000, including a deficiency for the preceding year. Thus it is seen that the plan recommended here will cost no more than the present appropriation, and so there can be no doubt of the ability of the State to make the payments required by the plan recommended.

This same conclusion is supported by the data given in Chapter II relative to the social and economic conditions. The State of New York is not paying excessive amounts for education as compared with her wealth and the income of her citizens, nor is the appro-

priation coming from the central treasury excessive as compared with the appropriations made by other states, since $20,000,000 is approximately 20 percent of the total expenses and 17 percent of the total expenditures (see Chapter II). Thus from both points of view the financial ability of the State to adopt the plan is proved.

General Observations

It seems desirable to make a few general observations upon the plan of central support herein recommended before bringing the study to a close.

1. It was said in Chapter VIII in treating the theory of central school support that the proportion of total support which should come from the central treasury in any state depends upon the conditions in that state, particularly as regards differences in ability to support schools and differences in conceptions as to what constitutes a good school as revealed by the effort made as expressed in terms of the tax-rate. The methods of study followed in previous chapters have given answer to this question for the State of New York. Approximately one-fifth of the total expenses or one-sixth of the total expenditures, $20,000,000, may be taken for the time being as valid standards.

2. Inasmuch as the formula recommended can be computed with different values assigned to the various factors, and, inasmuch as the costs of schools, the valuations of property and tax-rates will in the ordinary course of events change from time to time it is, therefore, recommended that in the event a law is passed adopting this plan the general principles underlying it be enacted and that it be left to the State Department of Education annually or periodically to determine the standards in accordance with the principles.

3. Among the possible modifications is the substitution in the formula of the total local tax-rate instead of the tax-rate for expenses of schools. It would seem that there would be little gain and much loss by this plan. There would be little gain by reason of the fact that the equalized tax-rates in towns and cities differ very little from each other and also by reason of the further fact that the proportion which the school tax is of the total tax varies only in small amounts in cities, villages and rural districts when they are taken

as groups.[1] The loss that would come from such a plan would be the tendency to subject the determination of the school tax to considerations lying outside of purely school matters in much the same way as is now the case in those cities in the State in which the school board gets money from the city council. Both the experience of school administrators generally throughout the country and the results of studies that have been made in this field show that those school systems thus subjected to external control are not so efficient, as a class, as those in districts which are independent of municipal action.

4. The adoption of such a plan as that recommended in this study for the State of New York does not involve the recognition of an entirely new principle as would be the case in many states of the Union. The system of state aid for highways in this State is very similar to the plan proposed herein. While the highway law bases its valuations upon the assessed values rather than upon the equalized valuations, and in that respect is inferior to the plan recommended herein, nevertheless it takes into account in its distribution of aid the amount of wealth for each unit of highway and the efforts which the towns make as measured by the number of mills of tax levied. Corresponding features in the plan recommended herein are the measurement of the ability of the school districts to support schools in terms of equalized valuation per teacher and the effort which districts make to have good schools as measured by the equalized tax-rate.

The system of state aid for highways is like the plan for state aid recommended herein for schools in another important respect. Both of them start with the conditions in the local community and adjust their aid to those conditions. In the system of General Aid for schools now in use in the State of New York it is not necessary for the State Department of Education to know anything (except in the case of the rural school districts having one teacher and assessed

[1] The percent that school taxes are of total taxes in Delaware, Monroe and Tompkins counties was, in 1919, 36 percent, 33 percent and 30 percent respectively. In 29 cities in the same year the percents varied from 17 to 45, the median being 34.6 percent. The tax-rate for all purposes in cities ranged from 13 to 61 mills, the median being 33 mills. In Delaware, Monroe and Tompkins counties the median rate for all purposes was 33, 17 and 32.5 mills respectively. (Based on a study of the tax-rates as printed in the Report of the State Tax Commission, 1919.)

valuation less than 100,000) about conditions in the local communities provided the minimum standards are met; and in the case of those districts no inquiry is made as to the amount of effort they may make to support a good school. Naturally, the tendency exists in many districts to add as little as possible through local tax and to depend less and less upon themselves. In contrast with this situation in the schools is that in highways where the tendency is to support them more liberally because it is known that each additional effort made by the local community is met with increased aid from the State. The favor with which this feature of the State Highway law is regarded in New York should provide favorable conditions for the adoption of a similar method for the apportionment of the general state school appropriation.

TABLE 57.—EXPENDITURES FOR DIFFERENT PURPOSES FOR THE YEAR ENDING JULY 31, 1920

Districts	Instruction		Operation			Cost of maintenance	Auxiliary agencies	Fixed charges	Total expenses of maintaining school	Debt service	Capital outlay	Number of teachers	Average daily attendance
	Salaries of teachers	Other expenses of instruction	Wages of janitor and other employes	Cost of fuel	Other expense of operation								
Delaware County First Supervisory District													
Masonville No. 1	$1,387	$33	$18	$98	$6	$87	$25	$15	$1,669	$153	..	2	23
" " 2	612	9	10	1	..	265	7	10	914	..	..	1	7
" " 4	646	5	..	30	4	..	..	..	685	..	..	1	2½
" " 5	558	18	5	22	3	41	7	5	659	17	..	1	7
" " 6	576	12	9	34	2	29	12	5	679	..	..	1	13
" " 8	630	17	..	41	3	693	10	9	1,403	..	..	1	10
" " 9	540	8	20	40	1	..	11	15	635	..	$289	1	13
" " 11	640	10	23	45	3	..	16	13	750	..	223	1	16
" " 12	684	10	3	24	2	4	8	5	740	..	..	1	9
" " 13	586	17	..	21	9	8	10	4	655	..	..	1	7
" " 14	648	18	3	19	1	9	10	5	713	..	..	1	10
" " 15	594	12	..	30	..	..	5	5	646	..	..	1	5

TABLE 58.—EXPENDITURES FOR DIFFERENT PURPOSES FOR THE YEAR ENDING JULY 31, 1920 (PER CAPITA PUPIL, AVERAGE DAILY ATTENDANCE)

Districts	Instruction		Operation			Cost of maintenance	Auxiliary agencies	Fixed charges	Total expenses of maintaining school	Debt service	Capital outlay
	Salaries of teachers	Other expenses of instruction	Wages of janitor	Cost of fuel	Other expenses of operation						
Delaware County First Supervisory District											
Masonville No. 1	$60.34	$1.47	$0.78	$4.26	$0.26	$5.78	$1.09	$0.65	$72.56	$6.76	..
" " 2	87.43	1.29	1.43	.14	..	3.78	1.00	1.43	130.57	..	..
" " 4	258.40	2.00	..	12.50	1.60	..	..	..	27.40	..	..
" " 5	79.71	2.57	.71	3.14	4.28	5.85	1.00	.71	94.14	2.43	..
" " 6	44.25	.91	.69	2.61	.16	2.23	.92	.38	52.23	..	..
" " 8	63.00	1.70	..	4.10	.30	69.30	1.00	.90	140.30	..	..
" " 9	41.53	.62	1.54	3.07	.08	..	.88	1.15	48.85	..	$22.23
" " 11	40.00	.63	1.47	2.81	.19	..	1.00	.81	46.87	..	13.93
" " 12	76.00	.11	.33	2.73	.22	.44	.88	.55	82.22	..	..
" " 13	83.71	2.43	..	3.00	1.28	1.14	1.43	.57	93.57	..	..
" " 14	64.80	1.80	.30	1.90	.10	.90	1.00	.50	71.30	..	..
" " 15	118.80	2.40	..	6.00	..	..	1.00	1.00	129.20	..	..

TABLE 59.—THE PERCENT OF TOTAL COST IN COMMON SCHOOL DISTRICTS FOR EACH ITEM OF EXPENSE

Districts	Instruction		Operation			Cost of maintenance	Auxiliary agencies	Fixed charges
	Salaries of teachers	Other expenses of instruction	Wages of janitor, etc.	Cost of fuel	Other expenses of operation			
Delaware County								
First Supervisory District								
Masonville No. 1	$83.2	$1.9	$1.1	$5.8	$0.4	$5.2	$1.5	$0.9
" " 2	67.0	0.9	1.1	0.1	..	29.0	0.7	1.2
" " 4	94.3	0.7	..	4.4	0.6	..	..	..
" " 5	84.6	2.6	0.8	3.5	0.5	6.2	1.1	0.8
" " 6	84.8	1.7	1.3	5.0	0.3	4.3	1.8	0.7
" " 8	44.9	1.2	..	3.0	0.1	49.4	0.7	0.7
" " 9	85.0	1.4	3.1	6.2	0.2	..	1.7	2.4
" " 11	85.2	1.3	3.1	6.0	0.4	..	2.2	1.7
" " 12	92.5	1.3	0.4	3.2	0.3	0.5	1.1	0.7
" " 13	89.5	2.6	..	3.2	1.4	1.3	1.5	0.6
" " 14	91.0	2.5	0.4	2.7	0.1	1.2	1.4	0.7
" " 15	91.9	1.9	..	4.6	..	..	0.8	0.8

TABLE 60.—ASSESSED VALUATION, TAX-RATE, RATE OF EQUALIZATION, EQUALIZED VALUATION, EQUALIZED TAX-RATE, EQUALIZED VALUATION AND STATE SUPPORT PER TEACHER AND PUPIL

	Assessed valuation	Tax-rate per thousand	Rate of equalization	True valuation	True tax-rate	True valuation		State money	
						Per teacher	Per pupil	Per teacher	Per pupil
Districts....1	2	3		4	5	6	7	8	9
Delaware County									
First Supervisory District									
Masonville No. 1	$72,207	26.70	46	$156,972	12.30	$78,486	$6,825	$219	$19
" " 2	29,950	12.12	46	65,109	5.58	65,109	9,301	507	72
" " 4	19,675	25.00	46	42,771	11.50	42,771	14,257	106	35
" " 5	15,925	22.00	46	34,620	10.13	34,620	4,946	307	44
" " 6	16,950	24.35	46	36,848	11.20	36,848	2,834	306	24
" " 8	37,163	25.00	46	80,789	11.50	80,789	8,079	283	28
" " 9	26,220	21.14	46	57,000	9.73	57,000	4,385	280	22
" " 11	33,225	19.65	46	72,224	9.04	72,224	4,514	281	18
" " 12	6,602	73.05	46	14,352	33.60	14,352	1,595	249	28
" " 13	29,700	15.00	46	64,565	6.90	64,565	9,924	274	39
" " 14	20,275	19.94	46	44,076	9.17	44,076	4,408	302	30
" " 15	16,650	15.96	46	36,196	7.35	36,196	7,239	307	61

TABLE 61.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR OTHER EXPENSES OF INSTRUCTION IN 1,008 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Percent of total expenses	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0	6	13	3	2	1	2	..	..	10	1	..	..	1	..	10	..	1	7	..	20	20	23	3	..	123
.1– 0.9	17	22	28	11	26	15	8	4	20	11	7	13	14	1	15	1	9	27	2	15	4	28	5	1	304
1– 1.9	21	9	16	19	11	20	19	15	7	6	8	15	21	8	6	4	18	7	8	5	2	3	6	18	272
2– 2.9	5	..	3	10	2	6	1	5	1	8	5	2	13	14	..	10	6	2	5	..	..	1	6	14	119
3– 3.9	..	3	..	6	..	1	2	2	3	4	2	1	2	9	..	8	..	1	3	..	..	..	4	5	56
4– 4.9	..	1	..	3	..	..	2	..	3	3	3	3	..	4	..	9	..	..	5	1	..	..	5	1	43
5– 5.9	..	1	..	1	..	..	1	1	1	4	1	1	..	3	1	5	..	..	2	..	..	..	3	..	25
6– 6.9	..	..	..	..	..	..	4	..	2	1	1	..	..	1	..	2	..	..	4	..	..	..	1	..	16
7– 7.9	..	..	..	..	..	..	1	2	1	1	..	..	..	2	..	1	..	..	..	1	..	..	1	..	10
8– 8.9	..	..	..	..	..	..	..	3	1	2	3	..	..	..	..	..	..	..	1	..	..	..	1	..	11
9– 9.9	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	4
10–10.9	..	..	..	..	..	..	1	3	..	1	1	..	..	..	..	..	..	..	2	..	..	..	1	..	9
11–11.9	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2
12–12.9	..	..	..	..	..	..	..	..	..	1	1	..	..	1	..	..	..	..	1	..	..	..	1	..	5
13–13.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
14–14.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
15–15.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16–16.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
17–17.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18–18.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19–19.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20–20.9	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	6
30–30.9	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	2
Total....	49	49	50	52	40	44	39	37	52	44	33	37	51	43	32	40	34	44	34	42	26	55	42	39	1,008
Rank....	10	5	8	17	7	11	15	16	9	21	19	12	14	22	4	24	13	6	20	3	1	2	23	18	..
Median percents	1.05	.52	.78	1.84	.73	1.25	1.60	1.83	.80	2.50	2.30	1.37	1.50	2.89	.40	3.62	1.39	.54	2.40	.06	0	0	3.25	2.04	1.28

First quartile, .42; third quartile, 2.47

TABLE 62.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR WAGES OF JANITORS AND OTHER EMPLOYEES IN 996 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Percent of total expenses	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0	13	7	19	14	5	20	..	..	1	2	..	4	5	3	..	..	2	1	4	1	2	4	..	..	107
.1– 0.9	8	6	7	18	13	1	..	1	3	..	4	2	6	13	..	1	2	6	1	6	4	5	1	6	114
1– 1.9	13	10	17	9	8	11	2	1	2	1	6	11	13	10	9	4	4	15	4	25	5	21	2	4	207
2– 2.9	6	2	3	4	6	5	7	12	6	11	11	6	12	4	16	11	12	6	8	8	5	12	3	4	180
3– 3.9	3	7	3	5	1	1	6	12	7	12	4	6	9	2	5	13	6	5	9	1	8	5	4	8	142
4– 4.9	2	9	..	1	1	3	8	3	12	9	4	5	3	3	2	4	2	6	3	..	..	6	6	9	101
5– 5.9	4	2	1	1	..	1	6	5	4	4	1	2	1	6	..	3	2	..	2	..	1	..	6	5	57
6– 6.9	..	3	..	..	1	1	3	1	5	2	..	1	..	1	..	1	..	1	..	1	1	1	5	3	31
7– 7.9	..	1	..	..	1	..	1	1	4	2	..	..	1	1	..	1	2	..	2	..	..	..	9	..	26
8– 8.9	..	1	..	..	..	..	1	..	6	..	..	..	1	..	..	2	..	3	..	..	..	..	1	..	15
9– 9.9	..	..	..	..	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	8
10–10.9	..	1	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	1	..	6
11–11.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12–12.9	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Total....	49	49	50	52	37	43	39	37	51	44	30	37	51	43	32	40	32	43	34	42	26	54	42	39	996
Rank....	5	17	2	1	4	3	23	6	22	20	15	12	11	7	14	19	16	10	18	8	13	9	24	21	..
Median percents	1.23	2.75	.85	.67	1.06	1.04	4.56	1.37	4.53	3.67	2.45	2.25	2.12	1.55	2.44	3.31	2.67	1.97	3.00	1.56	2.40	1.86	5.40	3.69	2.3

First quartile, 1.13; third quartile, 3.97

TABLE 63.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR FUEL IN 1,012 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Percent of total expenses	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0	..	7	1	7	5	1	..	..	..	..	3	..	2	..	1	1	2	1	..	..	..	5	1	..	37
.1– .99	4	2	1	..	..	..	1	..	..	1	1	1	1	..	2	..	2	..	..	..	1	2	2	1	22
1– 1.99	2	..	1	3	2	3	..	..	..	..	..	..	1	4	..	1	2	1	1	6	1	2	1	1	32
2– 2.99	6	2	9	5	6	7	2	1	3	3	..	4	6	8	..	4	5	3	..	8	1	1	2	1	87
3– 3.99	16	4	10	12	9	10	4	1	2	3	5	1	10	8	2	3	9	4	3	9	4	4	8	3	144
4– 4.99	7	6	14	14	5	8	..	7	4	6	8	8	5	7	5	5	5	7	2	7	6	8	3	2	149
5– 5.99	7	8	7	9	7	7	7	9	13	11	4	7	11	4	11	7	4	7	3	6	7	12	4	9	181
6– 6.99	6	6	5	1	1	3	6	4	6	7	9	8	9	5	4	9	5	5	4	1	3	4	5	10	126
7– 7.99	..	6	..	..	2	2	7	7	5	6	4	4	4	1	1	5	..	5	7	1	3	5	3	5	83
8– 8.99	1	6	..	1	1	1	4	3	3	3	1	2	1	2	6	..	..	7	3	1	..	5	3	2	56
9– 9.99	..	1	..	..	1	..	3	2	2	3	..	3	..	1	..	4	..	1	3	1	..	3	1	2	31
10–10.99	..	1	..	..	..	1	..	..	3	1	..	..	..	..	..	1	..	1	2	2	..	1	4	1	18
11–11.99	1	..	1	..	..	..	2	1	1	..	1	..	..	1	..	..	..	2	2	..	..	3	2	..	17
12–12.99	..	2	..	..	..	..	1	..	3	..	..	..	..	1	..	..	..	..	1	..	..	1	1	..	10
13–13.99	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	4
14–14.99	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	5
15–15.99	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3
16–16.99	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
17–17.99	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
18–18.99	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
19–19.99	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
20–20.99	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
21–21.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
22–22.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23–23.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24–24.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25–25.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26–26.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Total....	49	51	50	52	40	44	38	37	51	44	36	38	50	43	32	40	34	44	34	42	26	56	42	39	1,012
Rank....	3	14	7	5	2	6	17	21	23	16	11	15	10	8	13	19	1	18	24	4	9	12	20	22	..
Median percents	3.78	5.56	4.21	3.92	3.77	4.12	5.83	6.12	6.58	5.82	5.25	5.71	5.00	4.21	5.55	5.86	3.66	5.86	7.57	3.78	5.00	5.50	6.00	6.25	5.19

First quartile, 3.52; third quartile, 6.84

TABLE 64.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR COST OF MAINTENANCE IN 999 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Percent of total expenses	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0	12	10	20	29	12	15	4	4	35	9	5	13	7	14	5	4	6	11	7	3	8	17	7	12	269
.1– 0.9	17	8	13	13	17	15	2	..	2	9	11	3	8	11	4	6	10	10	8	2	9	6	5	9	198
1– 1.9	7	9	7	7	7	4	9	10	2	5	4	6	7	6	3	5	5	4	5	3	4	7	2	6	134
2– 2.9	2	1	2	3	2	3	3	1	1	4	5	7	5	2	3	5	4	3	2	2	4	2	5	3	74
3– 3.9	1	8	2	1	1	2	6	1	2	3	2	2	..	1	5	4	3	1	5	..	1	4	..	2	57
4– 4.9	2	..	1	1	..	..	4	2	2	1	1	3	5	2	1	4	2	2	..	..	..	3	2	1	39
5– 5.9	1	1	3	..	1	1	2	1	1	2	2	..	3	1	3	..	1	2	1	..	..	2	2	1	31
6– 6.9	1	1	..	..	..	..	..	2	..	2	2	..	1	..	2	4	..	1	..	..	..	1	2	2	21
7– 7.9	1	..	1	1	..	1	1	..	..	1	..	..	..	2	2	2	1	..	..	1	..	1	2	1	18
8– 8.9	1	1	..	..	..	1	..	..	1	..	..	2	..	1	1	1	..	..	1	..	..	3	..	..	13
9– 9.9	..	..	..	1	..	1	3	1	..	..	..	..	..	..	..	1	1	..	..	1	..	1	1	1	12
10–10.9	..	1	1	..	..	..	1	..	1	..	..	1	..	..	..	2	..	..	..	..	..	1	1	..	9
11–11.9	..	1	1	..	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	6
12–12.9	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	2	3	..	8
13–13.9	..	1	..	..	..	..	1	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	5
14–14.9	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	1	..	1	2	..	7
15–19.9	2	1	..	..	..	..	1	1	..	3	2	..	2	..	..	..	..	..	2	2	..	1	2	..	19
20–24.9	..	2	..	2	..	..	..	3	1	2	..	..	4	..	..	..	..	..	..	7	..	3	1	..	25
25–29.9	1	2	1	..	..	..	..	7	2	2	..	..	2	1	1	..	..	..	..	9	..	..	1	..	29
30–34.9	..	2	..	..	..	..	..	2	..	..	..	..	5	2	..	..	..	..	..	8	..	..	1	..	20
35–39.9	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	4
40–44.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
45–49.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
50–54.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
55–59.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total....	48	49	52	58	40	43	39	37	51	44	34	37	52	44	32	40	34	34	32	39	26	55	41	38	999
Rank....	9	10	3	1	5	4	22	23	2	16	14	15	18	11	21	20	12	7	13	24	6	8	19	17	..
Median percents	.70	1.72	.23	0	.47	.43	3.25	5.50	0	1.60	1.25	1.41	1.80	.73	3.20	3.00	1.20	.60	1.20	23.2	.55	.64	2.75	1.77	1.25

First quartile, 0; third quartile, 4.46

TABLE 65.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR AUXILIARY AGENCIES IN 1,008 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Percent of total expenses	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
0	6	5	5	8	15	1	2	4	..	5	10	9	11	7	3	3	3	12	7	4	4	8	4	1	137
.1– 0.9	20	15	38	12	13	27	4	8	24	3	6	10	12	5	4	9	6	7	4	24	6	3	7	17	284
1– 1.9	17	23	5	26	8	13	8	4	2	7	10	12	8	10	12	15	16	18	12	11	5	8	15	18	283
2– 2.9	2	4	1	8	2	3	13	7	6	6	2	3	6	7	6	4	10	5	7	2	3	8	9	..	124
3– 3.9	2	1	1	..	1	..	6	3	9	6	1	2	2	3	2	7	..	2	1	..	3	15	4	2	73
4– 4.9	..	..	..	..	1	..	5	8	8	5	1	..	5	7	2	2	..	..	2	..	2	5	3	..	56
5– 9.9	3	1	..	1	..	..	1	3	2	12	1	..	2	3	3	1	..	..	..	..	..	9	..	..	42
10–14.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
15–19.9	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2
20–24.9	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	2
25–29.9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1
30–34.9	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	3
Total....	50	49	50	56	40	44	39	37	51	44	31	36	48	42	32	41	35	44	34	42	26	56	42	39	1,008
Rank....	7	12	2	13	1	4	22	21	18	24	6	5	9	20	19	15	16	10	14	3	17	23	11	8	..
Median percents	.95	1.2	.53	1.31	.39	.78	2.42	2.39	1.75	3.16	.91	.90	1.12	1.90	1.75	1.57	1.59	1.16	1.50	.71	1.60	3.06	1.67	1.08	1.29

First quartile, .5; third quartile, 2.41

TABLE 66.—EXPENDITURES FOR SALARIES OF TEACHERS PER PUPIL IN 1,006 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Salaries of teachers	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$10– 14.99	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
15– 19.99	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	1	..	5
20– 24.99	..	1	..	..	..	..	..	1	2	3	..	1	..	2	..	..	..	..	..	..	..	1	3	..	14
25– 29.99	..	1	..	2	1	2	9	6	5	4	..	..	5	3	5	1,	2	3	..	1	2	2	6	1	61
30– 34.99	1	3	2	4	4	2	9	3	6	2	2	1	1	4	7	4	2	3	5	2	..	..	5	4	76
35– 39.99	2	7	5	2	3	1	7	3	7	6	..	3	6	4	7	5	5	2	5	3	2	7	5	10	107
40– 44.99	6	..	5	8	6	6	5	5	7	4	3	7	5	3	2	10	7	6	6	4	3	5	9	5	127
45– 49.99	4	7	3	7	1	3	2	8	5	5	4	3	2	5	5	4	3	5	2	4	1	7	2	4	96
50– 54.99	2	2	1	1	4	6	1	3	5	5	2	5	8	8	1	4	4	6	2	6	..	6	3	3	88
55– 59.99	4	1	6	1	2	3	3	3	2	2	6	2	4	3	1	3	1	3	2	3	3	3	1	2	64
60– 64.99	5	3	1	3	3	5	2	1	3	1	4	2	3	1	..	1	5	1	1	4	2	3	1	4	59
65– 69.99	5	2	5	4	2	2	..	1	3	1	4	3	1	..	1	2	..	4	1	6	3	3	1	..	54
70– 74.99	..	1	2	2	..	1	1	1	1	4	..	1	..	..	1	1	1	2	..	..	..	2	..	2	23
75– 79.99	3	1	2	..	2	3	..	..	1	1	2	3	4	..	1	1	..	1	1	..	..	2	..	2	30
80– 84.99	3	5	4	2	2	1	..	1	1	1	..	1	1	1	..	1	..	5	2	..	..	1	..	1	33
85– 89.99	1	1	..	..	1	1	..	..	1	1	1	1	1	1	..	..	..	..	1	4	4	..	1	..	20
90– 94.99	1	..	5	..	2	..	..	1	..	1	1	2	2	2	..	..	1	2	3	1	2	4	..	..	30
95– 99.99	1	..	..	2	..	1	..	..	1	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	8
100–104.99	1	..	3	2	1	2	..	..	..	..	..	..	2	2	..	..	1	..	..	..	..	2	..	..	16
105–109.99	1	2	1	1	1	1	1	..	..	..	1	..	..	..	..	..	1	2	1	1	1	1	..	1	17

110–114.99	1	1	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	8
115–119.99	1	3	..	..	..	..	..	..	..	..	..	..	1	2	..	..	..	..	..	..	..	..	..	7
120–124.99	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	3	1	..	8
125–129.99	2	2	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	1	..	..	7
130–134.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
135–139.99	1	..	2	2	2	2	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	11
140–144.99	..	..	..	2	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	5
145–149.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
150–154.99	..	1	..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	4
155–159.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1
160–164.99	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	..	1	..	..	..	4
165–169.99	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
170–174.99	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
175–179.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
180–184.99	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	3
185 and over	5	1	..	4	..	1	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	2	..	16
Total	51	47	50	52	40	44	40	37	51	43	34	36	48	46	32	39	35	46	33	41	26	55	41	39	1,006
Rank	24	19	22	23	17	20	1	7	4	11	18	12	13	10	2	5	9	14	8	16	21	15	3	6	..
Median expense	66.5	60.8	66	66	57	61	36	45.6	43	52.5	60	53	53	51	37	44	47	53	46	55.8	63	54.2	40.2	44.5	50.9

TABLE 67.—EXPENDITURES FOR OTHER EXPENSES OF INSTRUCTION PER PUPIL IN 1,008 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Other expenses of instruction	Supervisory districts																								Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$0	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	2	5	..	..	11
.01– .49	1	13	4	1	2	1	..	..	7	1	..	..	..	..	12	..	1	4	..	6	13	10	3	..	79
.50– .99	6	5	14	9	17	10	8	3	21	6	1	7	5	2	14	1	6	15	3	18	3	18	..	5	197
1.00– 1.49	14	9	9	12	9	16	11	8	7	6	6	9	16	5	6	4	11	16	3	9	4	10	9	10	219
1.50– 1.99	9	5	5	8	2	6	5	6	3	5	5	8	11	10	..	5	13	3	2	3	2	2	4	5	127
2.00– 2.49	7	6	10	6	4	4	2	5	1	4	3	5	5	5	..	6	1	2	7	2	1	2	4	12	104
2.50– 2.99	2	2	2	3	2	..	2	2	1	3	4	2	3	7	..	8	..	..	4	1	..	3	4	1	56
3.00– 3.49	3	3	5	1	2	1	4	2	..	3	4	1	3	1	..	7	1	..	2	..	..	1	2	2	48
3.50– 3.99	..	..	1	4	2	3	1	1	2	3	1	1	..	1	..	..	..	..	1	..	..	2	3	2	28
4.00– 4.49	..	1	..	1	..	1	1	..	5	2	..	1	3	2	..	4	..	1	1	..	..	1	1	2	27
4.50– 4.99	..	..	..	3	..	1	1	..	2	3	1	..	1	2	..	3	..	..	2	1	..	..	2	..	22
5.00– 5.99	1	1	..	1	..	1	1	1	..	3	2	..	1	2	..	..	..	1	2	..	1	..	2	..	20
6.00– 6.99	..	..	..	2	..	..	2	1	2	3	2	..	1	1	..	1	..	..	2	..	..	..	1	..	18
7.00– 7.99	..	1	..	..	..	..	..	2	..	1	1	..	..	2	..	..	..	..	..	..	..	..	2	..	9
8.00– 8.99	1	1	..	..	..	..	1	2	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	8
9.00– 9.99	..	..	..	..	..	..	..	1	..	..	2	..	..	1	..	..	..	..	1	1	..	1	..	..	7
10.00–14.99	1	1	..	..	..	..	..	1	1	1	..	1	2	..	..	1	..	..	4	..	..	..	1	..	14
15.00–19.99	3	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	3	..	8
20.00–24.99	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
25.00–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30.00–34.99	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
35.00–39.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
40.00–44.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
45.00–49.99	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3
Total....	49	49	50	52	40	44	39	37	52	44	33	37	51	43	32	40	34	44	34	42	26	55	42	39	1,008
Rank....	13	8	10	16	6	9	12	19	5	21	22	14	15	20	3	23	11	7	24	4	1	2	18	17	..
Median expense	1.63	1.30	1.38	1.75	1.05	1.34	1.55	2.15	.95	2.50	2.68	1.65	1.70	2.45	.64	2.75	1.45	1.06	2.75	.89	.42	.56	2.12	1.95	1.49

TABLE 68.—EXPENDITURES FOR WAGES OF JANITORS PER PUPIL IN 999 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Wages of janitors	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$0	13	7	19	14	5	20	..	..	1	2	..	4	5	3	..	..	2	1	4	1	2	4	..	..	107
.01– .49	6	4	5	13	7	2	..		..	..	1	1	5	8	2	1	2	3	2	..	2	3	..	7	74
.50– .99	7	5	10	7	11	4	1	1	3	2	3	5	3	9	11	3	4	11	3	12	4	12	2	3	136
1.00– 1.49	8	3	8	6	3	10	12	5	5	4	7	8	10	7	9	7	4	10	4	14	5	12	2	2	165
1.50– 1.99	3	8	4	4	3	1	5	7	9	9	4	4	14	4	6	8	7	3	6	7	1	6	6	6	135
2.00– 2.49	3	2	3	1	3	1	2	8	9	6	4	7	3	3	2	8	3	5	2	5	5	4	5	9	103
2.50– 2.99	2	4	..	3	3	3	4	6	5	4	5	3	1	3	1	4	1	2	5	1	2	4	6	2	74
3.00– 3.49	1	5	..	1	1	1	2	4	4	6	2	1	3	2	1	3	..	3	2	1	4	2	3	3	55
3.50– 3.99	..	3	..	..	2	1	5	2	2	6	2	2	1	1	..	2	2	1	2	..	..	2	..	1	37
4.00– 4.49	1	2	1	1	..	1	2	1	3	2	2	1	1	..	..	1	4	2	1	1	..	..	3	4	34
4.50– 4.99	..	2	..	..	..	..	2	..	5	1	..	1	2	3	..	..	..	1	..	..	..	2	3	1	23
5.00– 9.99	3	1	..	1	..	..	4	3	5	1	..	..	2	..	..	3	2	1	3	..	..	3	8	1	41
10.00–14.99	..	1	..	..	2	..	..	..	..	1	..	..	1	..	..	..	1	..	..	..	..	..	2	..	8
15.00–19.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2
20.00–24.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25.00–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30.00–34.99	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
35.00–39.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
40.00–44.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
45.00–49.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
50.00–54.99	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total....	49	49	50	52	40	44	39	37	51	44	30	37	51	43	32	40	32	43	34	42	25	54	42	39	999
Rank....	6	16	3	1	5	2	22	21	23	18	17	12	13	7	4	19	14	10	15	9	11	8	24	20	..
Median expense	.89	1.84	.55	.46	.86	.50	2.37	2.34	2.47	2.04	2.00	1.56	1.59	1.10	.67	2.06	1.79	1.32	1.83	1.28	1.45	1.25	3.00	2.08	1.56

TABLE 69.—EXPENDITURES FOR COST OF FUEL PER PUPIL IN 1,012 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Cost of fuel	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$0	..	7	1	7	5	1	..	..	..	..	3	..	2	..	1	1	2	1	..	..	..	5	1	..	37
0– 0.99	5	2	2	..	2	1	1	..	..	1	1	..	2	5	..	1	4	2	..	1	2	2	3	2	39
1– 1.99	3	3	7	14	10	10	7	3	7	5	1	4	7	7	7	5	9	3	2	6	3	4	8	3	138
2– 2.99	14	9	15	13	6	10	9	9	9	8	4	9	10	7	11	10	11	5	2	11	3	7	5	9	206
3- 3.99	9	5	10	6	3	12	7	3	8	8	11	9	10	9	9	6	3	6	6	9	8	7	6	9	179
4– 4.99	9	9	5	2	6	6	7	11	12	4	5	3	5	7	3	10	2	11	4	7	6	8	3	7	152
5– 5.99	1	4	2	3	2	2	5	5	..	7	4	3	3	2	1	1	..	8	7	3	..	4	7	5	73
6– 6.99	3	3	3	5	1	..	..	3	5	5	3	4	3	3	..	1	..	5	6	1	2	9	6	1	72
7– 7.99	..	2	4	1	1	..	1	3	3	1	..	2	3	2	..	2	..	2	4	1	..	3	2	1	38
8– 8.99	1	1	..	..	..	..	1	..	4	2	2	2	2	1	..	..	1	1	2	1	2	3	1	..	27
9– 9.99	1	..	..	..	2	1	..	..	..	1	2	..	1	..	..	2	..	..	..	..	..	3	1	2	16
10–10.99	..	..	..	..	2	..	..	..	1	1	..	..	..	..	..	..	..	..	1	2	..	..	..	..	7
11–11.99	1	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	4
12–12.99	2	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	5
13–13.99	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
14–14.99	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
15–15.99	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
16–16.99	..	1	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	6
17–17.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18–18.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19–19.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1

20–20.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
21–21.99	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	3
22–22.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23–23.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
24–24.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25–25.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
26–26.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27–27.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
28–28.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
29–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
30–30.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
31–31.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
32–32.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
33–33.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
34–34.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
35–35.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
36–36.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37–37.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
38–38.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
39 and over	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	4
Total....	49	51	50	52	40	44	39	37	51	44	36	37	50	43	32	40	34	44	34	42	26	56	42	39	1,012
Rank....	7	19	5	2	3	6	10	22	21	20	18	15	11	8	14	13	1	12	24	9	16	23	17	14	..
Median expense	3.28	3.90	3.00	2.39	2.50	3.00	3.36	4.33	4.12	4.00	3.82	3.61	3.40	3.28	2.73	3.50	2.18	3.45	5.43	3.33	3.62	4.37	3.66	3.61	3.48

TABLE 70.—EXPENDITURES FOR COST OF MAINTENANCE PER PUPIL IN 999 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Cost of maintenance	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$0	12	10	20	29	12	15	4	4	35	9	5	13	7	14	5	4	6	2	7	3	8	17	7	12	260
.01– .49	12	6	9	12	10	15	5	..	2	7	10	2	9	9	3	4	7	8	4	1	7	5	3	8	158
.50– .99	6	2	8	5	7	3	7	5	1	5	6	7	6	6	4	5	7	4	6	6	1	2	4	3	116
1.00– 1.49	7	6	1	3	5	3	2	5	..	4	5	3	5	4	7	6	4	5	5	3	5	2	3	4	97
1.50– 1.99	1	4	3	4	..	1	5	2	5	2	1	1	4	..	1	2	2	1	3	..	1	4	1	1	50
2.00– 2.49	2	3	2	..	1	1	4	2	1	1	2	2	1	3	2	2	1	2	..	..	..	3	1	4	40
2.50– 2.99	..	..	2	1	1	1	2	3	..	..	..	2	..	1	2	6	1	1	1	..	..	5	1	1	31
3.00– 3.49	..	4	..	..	3	..	1	1	1	2	..	..	2	..	2	2	..	..	..	..	1	..	2	1	22
3.50– 3.99	1	..	1	1	..	..	1	1	..	1	1	..	1	1	1	2	1	..	1	..	..	..	..	1	15
4.00– 4.49	..	2	..	1	..	..	2	1	..	1	2	..	1	1	1	..	..	1	2	..	..	1	3	..	19
4.50– 4.99	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	2	1	..	7
5.00– 5.49	..	3	..	..	1	1	..	2	..	3	..	..	1	1	..	..	1	..	..	..	..	2	1	..	16
5.50– 5.99	2	..	..	..	..	..	..	..	..	..	..	1	..	..	1	2	2	2	1	..	1	1	..	..	13
6.00– 6.49	..	..	1	..	..	1	..	..	..	..	..	..	..	1	..	2	1	1	..	2	..	..	2	1	12
6.50– 6.99	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2
7.00– 7.49	..	..	..	..	..	..	1	..	1	..	..	1	..	..	1	1	..	..	..	1	..	1	..	..	7
7.50– 7.99	..	..	..	..	..	..	1	..	..	..	..	2	2	..	..	1	..	..	..	..	1	1	1	1	10
8.00– 8.49	..	1	1	..	..	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	6
8.50– 8.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	1	..	3
9.00– 9.49	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	4

9.50– 9.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	1	..	..	..	1	..	5
10.00– 14.99	2	1	..	2	..	..	1	3	1	3	2	..	3	..	..	..	..	2	2	4	..	2	2	..	30
15.00– 19.99	..	3	1	..	..	..	..	2	..	2	..	1	4	1	..	..	..	..	..	5	..	2	1	1	23
20.00– 24.99	..	1	..	..	..	..	..	3	..	1	..	..	1	..	1	..	..	1	..	5	..	1	1	..	15
25.00– 29.99	..	..	..	..	..	..	..	1	1	1	..	..	3	1	..	..	..	1	..	3	..	..	1	..	12
30.00– 34.99	1	2	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	2	..	1	..	..	8
35.00– 39.99	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3
40.00– 44.99	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	..	..	..	..	4
45.00– 49.99	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	3
50.00– 54.99	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2
55.00– 59.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
60.00– 64.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1
65.00– 69.99	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2
70.00– 74.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
75.00– 79.99	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
80.00– 84.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
85.00– 89.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
90.00– 94.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
95.00– 99.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
100.00–104.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
105.00–109.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Total.....	48	49	50	58	40	43	39	37	51	44	34	37	52	44	32	40	34	34	33	39	26	55	42	38	999
Rank.....	9	11	4	1	6	3	18	22	2	14	10	12	11	7	15	20	21	16	13	24	5	19	23	8	..
Median expense ...	.50	.71	.28	0	.40	.21	1.61	2.58	0	1.12	.67	.75	1.40	.44	1.28	1.75	1.88	1.30	.96	7.44	.34	1.69	3.25	.44	.85

TABLE 71.—EXPENDITURES FOR AUXILIARY AGENCIES PER PUPIL IN 1,008 COMMON SCHOOL DISTRICTS IN THE 24 SUPERVISORY DISTRICTS

Auxiliary agencies	Supervisory districts																							Total
	Delaware No. 1	Delaware No. 2	Delaware No. 3	Delaware No. 4	Delaware No. 5	Delaware No. 6	Monroe No. 1	Monroe No. 2	Monroe No. 3	Monroe No. 4	Tompkins No. 1	Tompkins No. 2	Tompkins No. 3	Chautauqua No. 1	Clinton No. 3	Erie No. 1	Greene No. 1	Herkimer No. 1	Ontario No. 1	Oswego No. 2	Otsego No. 1	St. Lawrence No. 1	Suffolk No. 1	Wayne No. 2	
$0	6	5	5	8	15	1	2	4	..	5	10	9	11	7	3	3	3	12	7	4	4	8	4	1	137
.01– 0.49	2	8	17	5	5	11	3	5	24	3	6	4	1	1	5	3	1	3	2	..	2	1	7	9	128
.50– .99	23	17	23	18	12	23	10	4	3	..	11	16	16	11	16	20	17	14	9	28	7	7	14	24	343
1.00– 1.49	13	10	2	16	6	8	13	5	6	12	2	3	5	6	2	6	11	8	8	5	3	4	3	3	160
1.50– 1.99	2	4	1	1	1	..	6	4	3	5	1	1	6	3	1	3	2	4	2	2	1	7	7	1	68
2.00– 2.49	1	3	..	4	..	..	3	5	7	1	..	..	..	3	2	1	..	3	1	2	1	4	2	..	43
2.50– 2.99	1	..	..	..	..	..	..	3	4	4	..	1	..	3	1	1	..	..	3	..	1	2	1	1	26
3.00– 3.49	..	1	..	1	..	..	1	4	1	4	..	1	2	2	1	3	..	..	1	..	2	4	..	..	28
3.50– 3.99	..	..	2	..	..	..	1	3	1	4	..	..	2	2	..	..	1	..	..	..	1	2	2	..	21
4.00– 4.49	1	..	..	..	..	..	..	..	1	2	1	1	..	1	..	..	..	..	..	..	..	4	1	..	12
4.50– 4.99	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	5	..	..	8
5.00– 5.99	..	..	..	..	..	..	..	..	1	1	..	..	2	..	1	..	..	..	..	..	..	1	..	..	6
6.00– 6.99	..	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	4	..	..	8
7.00– 7.99	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	2
8.00– 8.99	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	4
9.00– 9.99	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	3
10.00–14.99	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
15.00–19.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
20.00–24.99	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	3	..	..	..	4
25.00–29.99	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	2
30.00–34.99	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	2
35.00 and over	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total....	50	49	50	56	40	44	39	37	51	44	31	36	48	42	32	41	35	44	34	42	26	56	42	39	1,008
Rank....	16	14	4	12	2	7	4	22	8	24	1	5	17	20	9	15	18	10	19	13	3	23	11	6	..
Median expense.	.87	.84	.56	.78	.50	.72	1.17	1.56	.75	1.70	.45	.65	.87	1.16	.75	.86	.90	.75	.94	.80	.50	1.62	.77	.70	.85

TABLE 72.—EXPENDITURES FOR TEACHERS' SALARIES PER AVERAGE DAILY ATTENDANCE IN 1,070 COMMON SCHOOL DISTRICTS, 79 UNION FREE SCHOOL DISTRICTS AND 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Teachers' salaries	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$10–14.99	1	..	..	1
15–19.99	5	..	..	5
20–24.99	14	..	..	14
25–29.99	61	2	5	68
30–34.99	76	4	17	97
35–39.99	107	13	34	154
40–44.99	127	17	25	169
45–49.99	96	13	14	123
50–54.99	88	20	3	111
55–59.99	64	6	4	74
60–64.99	59	1	1	61
65–69.99	54	..	..	54
70–74.99	23	2	..	25
75–79.99	30	1	..	31
80–84.99	33	..	..	33
85–89.99	20	..	1	21
90–94.99	30	2	..	32
95–99.99	8	..	..	8
100–104.99	16	..	..	16
105–109.99	17	..	..	17
110–114.99	8	..	..	8
115–119.99	7	..	..	7
120–124.99	8	..	..	8
125–129.99	7	..	..	7
130–134.99	1	..	..	1
135–139.99	11	..	..	11
140–144.99	5	..	..	5
145–149.99	..	..	..	..
150–154.99	4	..	..	4
155–159.99	1	..	..	1
160–164.99	4	..	..	4
165–169.99	1	..	..	1
170–174.99	1	..	..	1
175–179.99	..	..	..	..
180–184.99	3	..	..	3
185 and over	16	..	..	16
Total.....	1,006	81	104	1,191
Median expense...	50.9	46.7	39.41	48.55

TABLE 73.—EXPENDITURES FOR OTHER EXPENSES OF INSTRUCTION (PER AVERAGE DAILY ATTENDANCE) IN 1,008 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Other expenses of instruction	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0	11	..	..	11
.01–.49	79	7	4	90
.50–.99	197	11	5	213
1.00–1.49	219	19	10	248
1.50–1.99	127	15	14	156
2.00–2.49	104	9	16	129
2.50–2.99	56	9	14	79
3.00–3.49	48	4	14	66
3.50–3.99	28	0	11	39
4.00–4.49	27	1	5	33
4.50–4.99	22	3	4	29
5.00–5.99	20	3	3	26
6.00–6.99	18	..	1	19
7.00–7.99	9	..	2	11
8.00–8.99	8	..	..	8
9.00–9.99	7	..	..	7
10.00–14.99	14	..	1	15
15.00–19.99	8	..	..	8
20.00–24.99	1	..	..	1
25.00–29.99	..	..	..	..
30.00–34.99	1	..	..	1
35.00–39.99	..	..	..	..
40.00–44.99	1	..	..	1
45.00–49.99	3	..	..	3
Total.....	1,008	81	104	1,193
Median expense...	1.49	1.61	2.60	1.51

TABLE 74.—EXPENDITURES FOR WAGES OF JANITORS (PER AVERAGE DAILY ATTENDANCE) IN 999 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Wages of janitors	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0	107	..	..	107
.01– .49	74	..	..	74
.50– .99	136	..	..	136
1.00–1.49	165	1	..	166
1.50–1.99	135	10	..	145
2.00–2.49	103	8	9	120
2.50–2.99	74	14	18	106
3.00–3.49	55	12	25	92
3.50–3.99	37	15	15	67
4.00–4.49	34	6	12	52
4.50–4.99	23	8	10	41
5–9.99	41	6	15	62
10–14.99	8	1	..	9
15–19.99	2	..	..	2
20–24.99	..	..	..	..
25–29.99	..	..	..	..
30–34.99	2	..	..	2
35–39.99	..	..	..	..
40–44.99	1	..	..	1
45–49.99	1	..	..	1
50–54.99	1	..	..	1
Total.....	999	81	104	1,184
Median expense...	1.56	3.31	3.50	1.87

TABLE 75.—AUXILIARY AGENCIES PER AVERAGE DAILY ATTENDANCE IN 1,008 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Auxiliary agencies	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0	137	..	..	137
.01– .49	128	14	3	145
.50– .99	343	31	14	388
1.00–1.49	160	13	32	205
1.50–1.99	68	6	16	90
2.00–2.49	43	6	13	62
2.50–2.99	26	2	10	38
3.00–3.49	28	1	6	35
3.50–3.99	21	3	3	27
4.00–4.49	12	2	6	20
4.50–4.99	8	..	1	9
5.00–5.99	6	..	..	6
6.00–6.99	8	..	..	8
7.00–7.99	2	..	..	2
8.00–8.99	4	1	..	5
9.00–9.99	3	1	..	4
10.00–14.99	2	1	..	3
15.00–19.99	..	..	..	..
20.00–24.99	4	..	..	4
25.00–29.99	2	..	..	2
30.00–34.99	2	..	..	2
35.00 and over	1	..	..	1
Total.....	1,008	81	104	1,193
Median expense...	.84	.92	1.59	.90

TABLE 76.—EXPENDITURES FOR COST OF FUEL (PER AVERAGE DAILY ATTENDANCE) IN 1,012 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Cost of fuel	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0	37	..	..	37
.01– .99	39	8	3	50
1–1.99	138	4	13	155
2–2.99	206	14	26	246
3–3.99	179	11	30	220
4–4.99	152	16	16	184
5–5.99	73	9	11	93
6–6.99	72	5	4	81
7–7.99	38	5	1	44
8–8.99	27	5	..	32
9–9.99	16	1	..	17
10–10.99	7	..	..	7
11–11.99	4	1	..	5
12–12.99	5	..	..	5
13–13.99	2	1	..	3
14–14.99	1	..	..	1
15–15.99	1	..	..	1
16–16.99	6	..	..	6
17–17.99	..	..	..	..
18–18.99	..	..	..	..
19–19.99	1	..	..	1
20–20.99	..	..	..	..
21–21.99	3	..	..	3
22–22.99	..	..	..	..
23–23.99	..	..	..	..
24–24.99	..	..	..	..
25–25.99	..	..	..	..
26–26.99	..	..	..	..
27–27.99	..	..	..	..
28–28.99	..	..	..	..
29–29.99	..	..	..	..
30–30.99	..	..	..	..
31–31.99	..	..	..	..
32–32.99	..	..	..	..
33–33.99	1	..	..	1
34–34.99	..	..	..	..
35–35.99	..	..	..	..
36–36.99	..	..	..	..
37–37.99	..	..	..	..
38–38.99	..	..	..	..
39 and over	4	..	..	4
Over 39.99	..	1	..	1
Total	1,012	81	104	1,197
Median expense	3.48	4.21	3.33	3.50

TABLE 77.—EXPENDITURES FOR COST OF MAINTENANCE (PER AVERAGE DAILY ATTENDANCE) IN 999 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 104 CITIES AND VILLAGES UNDER SUPERINTENDENTS

Cost of maintenance	Common school districts	Union free school districts	Cities and villages under superintendents	Total
$0	260	..	..	260
.01– .49	158	13	4	175
.50– .99	116	10	6	132
1.00– 1.49	97	15	17	129
1.50– 1.99	49	7	26	82
2.00– 2.49	40	3	19	62
2.50– 2.99	31	10	10	51
3.00– 3.49	22	5	6	33
3.50– 3.99	15	1	5	21
4.00– 4.49	19	3	3	25
4.50– 4.99	7	4	2	13
5.00– 5.49	16	2	..	18
5.50– 5.99	13	1	2	16
6.00– 6.49	12	2	..	14
6.50– 6.99	2	1	..	3
7.00– 7.49	7	..	3	10
7.50– 7.99	10	1	..	11
8.00– 8.49	6	..	1	7
8.50– 8.99	3	..	..	3
9.00– 9.49	4	..	..	4
9.50– 9.99	5	..	..	5
10.00– 14.99	30	2	..	32
15.00– 19.99	23	1	..	24
20.00– 24.99	15	..	..	15
25.00– 29.99	12	..	..	12
30.00– 34.99	8	..	..	8
35.00– 39.99	3	..	..	3
40.00– 44.99	4	..	..	4
45.00– 49.99	3	..	..	3
50.00– 54.99	2	..	..	2
55.00– 59.99	..	..	..	..
60.00– 64.99	1	..	..	1
65.00– 69.99	2	..	..	2
70.00– 74.99	1	..	..	1
75.00– 79.99	1	..	..	1
80.00– 84.99	1	..	..	1
85.00– 89.99	..	..	..	..
90.00– 94.99	..	..	..	..
95.00– 99.99	..	..	..	..
100.00–104.99	..	..	..	..
105.00–109.99	1	..	..	1
Total.....	999	81	104	1,184
Median expense...	.85	1.67	1.98	1.09

TABLE 78.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR OTHER EXPENSES OF INSTRUCTION IN 1,008 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
0	123	..	..	123
.1– .9	304	7	3	314
1– 1.9	272	18	3	293
2– 2.9	119	24	9	152
3– 3.9	56	13	10	79
4– 4.9	43	9	12	64
5– 5.9	25	3	9	37
6– 6.9	16	4	8	28
7– 7.9	10	3	1	14
8– 8.9	11	..	3	14
9– 9.9	4	..	1	5
10–10.9	9	..	..	9
11–11.9	2	..	..	2
12–12.9	5	..	..	5
13–13.9	1	..	..	1
14–14.9	..	..	..	..
15–15.9	..	..	..	..
16–16.9	..	..	..	..
17–17.9	..	..	..	..
18–18.9	..	..	..	..
19–19.9	..	..	..	..
20–20.9	6	..	..	6
30–30.9	2	..	..	2
Total.....	1,008	81	59	1,148
Median percent of expense.....	1.28	2.64	4.37	1.46

TABLE 79.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR WAGES OF JANITORS AND OTHER EMPLOYEES IN 996 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS AND 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
0	107	..	..	107
.1– 0.9	114	..	..	114
1– 1.9	207	..	..	207
2– 2.9	180	1	..	181
3– 3.9	142	15	1	158
4– 4.9	101	20	12	133
5– 5.9	57	18	16	91
6– 6.9	31	18	19	68
7– 7.9	26	8	7	41
8– 8.9	15	..	4	19
9– 9.9	8	..	..	8
10–10.9	6	..	..	6
11–11.9	..	..	..	..
12–12.9	2	..	..	2
13–13.9	..	..	..	..
14–14.9	..	1	..	1
Total.....	996	81	59	1,136
Median percent of expense.....	2.38	5.25	6.02	2.77

TABLE 80.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR FUEL IN 1,012 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, AND 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
0	37	..	1	38
.1– .99	22	5	..	27
1– 1.99	32	3	2	37
2– 2.99	87	2	3	92
3– 3.99	144	9	9	162
4– 4.99	149	8	10	167
5– 5.99	181	8	14	203
6– 6.99	126	12	8	146
7– 7.99	83	6	6	95
8– 8.99	56	7	2	65
9– 9.99	31	10	2	43
10–10.99	18	3	1	22
11–11.99	17	3	1	21
12–12.99	10	..	..	10
13–13.99	4	3	..	7
14–14.99	5	..	..	5
15–15.99	3	1	..	4
16–16.99	1	..	..	1
17–17.99	2	..	..	2
18–18.99	1	..	..	1
19–19.99	1	..	..	1
20–20.99	1	..	..	1
21–21.99	..	1	..	1
22–22.99	..	..	..	..
23–23.99	..	..	..	..
24–24.99	..	..	..	..
25–25.99	..	..	..	..
26–26.99	1	..	..	1
Total.....	1,012	81	59	1,152
Median percent of expense.....	5.19	6.45	5.32	5.26

TABLE 81.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR COST OF MAINTENANCE IN 999 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, AND 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
0	269	..	..	269
.1– 0.9	198	14	1	213
1– 1.9	134	12	3	149
2– 2.9	74	17	17	108
3– 3.9	57	6	16	79
4– 4.9	39	10	11	60
5– 5.9	31	7	3	41
6– 6.9	21	5	2	28
7– 7.9	18	2	5	25
8– 8.9	13	1	1	15
9– 9.9	12	2	..	14
10–10.9	9	1	..	10
11–11.9	6	1	..	7
12–12.9	8	..	..	8
13–13.9	5	..	..	5
14–14.9	7	1	..	8
15–19.9	19	2	..	21
20–24.9	25	..	..	25
25–29.9	29	..	..	29
30–34.9	20	..	..	20
35–39.9	4	..	..	4
40–44.9	..	..	..	..
45–49.9	..	..	..	..
50–54.9	..	..	..	..
55–59.9	1	..	..	1
Total.....	999	81	59	1,139
Median percent of expense.....	1.24	2.85	3.53	1.58

TABLE 82.—PERCENT OF TOTAL EXPENSES DISTRIBUTED FOR AUXILIARY AGENCIES IN 1,008 COMMON SCHOOL DISTRICTS, 81 UNION FREE SCHOOL DISTRICTS, AND 59 CITIES

Percent of total expenses	Common school districts	Union free school districts	Cities	Total
0	137	..	..	137
.1– 0.9	284	20	1	305
1– 1.9	283	32	11	326
2– 2.9	124	10	22	156
3– 3.9	73	5	12	90
4– 4.9	56	8	5	69
5– 5.9	..	2	3	5
5– 9.9	42	..	..	42
6– 6.9	..	1	4	5
10–14.9	1	3	1	5
15–19.9	2	..	..	2
20–24.9	2	..	..	2
25–29.9	1	..	..	1
30–34.9	3	..	..	3
Total.....	1,008	81	59	1,148
Median percent of expense.....	1.29	1.64	2.79	1.40

TABLE 83.—EQUALIZED VALUATIONS PER TEACHER IN FIRST-, SECOND-, AND THIRD-CLASS CITIES AND VILLAGES UNDER SUPERINTENDENTS

Equalized valuations	First-class	Second-class	Third-class	Villages	Total
$0– 9,999	..	..	..	..	..
90,000– 99,999	..	..	1	..	1
100,000–109,999	..	..	2	1	3
110,000–119,999	..	..	2	3	5
120,000–129,999	..	..	3	2	5
130,000–139,999	..	..	1	4	5
140,000–149,999	..	..	1	4	5
150,000–159,999	..	..	9	4	13
160,000–169,999	..	..	2	2	4
170,000–179,999	..	1	6	2	9
180,000–189,999	..	..	4	3	7
190,000–199,999	..	..	..	2	2
200,000–209,999	..	1	3	1	5
210,000–219,999	..	..	1	..	1
220,000–229,999	..	1	1	3	5
230,000–239,999	..	..	1	2	3
240,000–249,999	..	1	3	..	4
250,000–259,999	1	..	1	2	4
260,000–269,999	1	..	2	..	3
270,000–279,999	..	..	1	1	2
280,000–289,999	..	..	..	1	1
290,000–299,999	..	2	..	..	2
300,000–309,999	..	..	..	..	..
310,000–319,999	..	..	..	..	..
320,000–329,999	..	1	1	3	5
330,000–339,999	..	..	1	..	1
340,000–349,999	..	..	1	..	1
350,000–359,999	..	..	..	..	..
360,000–369,999	..	..	..	..	..
370,000–379,999	..	..	..	..	..
380,000–389,999	..	..	1	1	2
390,000–399,999	..	..	..	1	1
400,000–409,999	1	..	..	..	1
410,000–419,999	..	..	..	..	..
420,000–429,999	..	..	..	..	..
430,000–439,999	..	..	1	..	1
440,000–449,999	..	..	..	..	..
Over 450,000	..	..	..	3	3
	3	7	49	45	104

Median = 182,857

TABLE 84.—EQUALIZED VALUATIONS AND NUMBER OF TEACHERS FOR FIRST-, SECOND-, AND THIRD-CLASS CITIES ARRANGED ACCORDING TO VALUATIONS PER TEACHER IN ASCENDING ORDER

Equalized valuations	Cities	Number of teachers
	CITIES	
FIRST-CLASS		
250,000–259,999	Rochester	1,422
260,000–269,999	Buffalo	2,330
400,000–409,999	New York	23,529
SECOND-CLASS		
170,000–179,999	Binghamton	340
200,000–209,999	Schenectady	550
220,000–229,999	Utica	450
240,000–249,999	Troy	231
290,000–299,999	Syracuse	691
" "	Yonkers	590
320,000–329,999	Albany	422
THIRD-CLASS		
90,000– 99,999	Corning	38
100,000–109,999	Cortland	63
" "	Watervliet	67
110,000–119,999	Newburgh	247
" "	Oneida	58
120,000–129,999	Plattsburg	48
" "	Port Jervis	62
" "	Johnstown	64
130,000–139,999	Hornell	65
140,000–149,999	Saratoga Springs	70
150,000–159,999	Hudson	56
" "	Salamanca	49
" "	Auburn	193
" "	Mechanicsville	65
" "	Rensselaer	57
" "	Olean	125
" "	Norwich	48
" "	Canandaigua	47
" "	Ogdensburg	62
160,000–169,999	Lockport	119
" "	Elmira	226
170,000–179,999	Dunkirk	109
" "	Gloversville	117
" "	Tonawanda	52
" "	Beacon	52
" "	Watertown	168
" "	Rome	111
180,000–189,999	Kingston	118
" "	No. Tonawanda	79
" "	Jamestown	206
" "	Fulton	68
200,000–209,999	Oneonta	51
" "	Amsterdam	152
" "	Batavia	80
210,000–219,999	Ithaca	101

TABLE 84.—EQUALIZED VALUATIONS AND NUMBER OF TEACHERS FOR FIRST-, SECOND- AND THIRD-CLASS CITIES ARRANGED ACCORDING TO VALUATIONS PER TEACHER IN ASCENDING ORDER—*Continued*

CITIES

Equalized valuations	Cities	Number of teachers
THIRD-CLASS		
220,000–229,999	Little Falls	49
230,000–239,999	Geneva	74
240,000–249,999	Corning	38
" "	Glen Falls	61
" "	Oswego	100
250,000–259,999	Cohoes	60
260,000–269,999	Middletown	78
260,000–269,999	Mt. Vernon	256
270,000–279,999	Poughkeepsie	139
320,000–329,999	White Plains	132
330,000–339,999	New Rochelle	63
340,000–349,999	Glencove	48
380,000–389,999	Niagara Falls	242
430,000–439,999	Lackawanna	63
VILLAGES		
100,000–109,999	Malone	45
110,000–119,999	Endicott	84
" "	Port Chester	137
" "	Waverly	36
120,000–129,999	Hoosick Falls	28
" "	Owego	28
130,000–139,999	Albion	83
" "	Fredonia	33
" "	Johnson City	67
" "	Peekskill (District No. 8)	36
140,000–149,999	No. Tarrytown	29
" "	Peekskill (District No. 7)	40
" "	Penn Yan	30
" "	Saranac Lake	31
150,000–159,999	Haverstraw	24
" "	Medina	37
" "	Nyack	41
" "	Patchogue	49
160,000–169,999	Catskill	28
" "	Waterford	25
170,000–179,999	Newark	42
" "	Seneca Falls	31
180,000–189,999	Dansville	24
" "	Massena	44
" "	Wellsville	36
190,000–199,999	Hempstead	53
" "	Ilion	59
200,000–209,999	Freeport	62
220,000–229,999	Lancaster	27
" "	Ossining	61
" "	Solvay	63

TABLE 84.—EQUALIZED VALUATIONS AND NUMBER OF TEACHERS FOR FIRST-, SECOND-, AND THIRD-CLASS CITIES ARRANGED ACCORDINO TO VALUATIONS PER TEACHER IN ASCENDING ORDER—*Continued*

VILLAGES

Equalized valuations	Cities	Number of teachers
230,000–239,999	Herkimer	62
" "	Rockville Center	41
250,000–259,999	Bay Shore	31
" "	Huntington	51
270,000–279,999	Lawrence	62
280,000–289,999	Hastings-on-Hudson	31
320,000–329,999	Depew	25
" "	Port Washington	47
" "	Tarrytown	32
380,000–389,999	Pelham Manor	43
390,000–399,999	Mamaroneck	56
720,000–729,999	Walden	30
800,000–809,999	Whitehall	35
980,000–989,999	Hudson Falls	39

SURVEY OF NEW YORK STATE RURAL SCHOOLS

THE survey was organized with the following sections and directors:

Administration and Supervision. C. H. Judd.
School Support. Harlan Updegraff.
Teachers and Courses of Study. W. C. Bagley.
School Buildings. J. E. Butterworth.
Measuring the Work of the Schools. M. E. Haggerty.
Community Relations. Mabel Carney.

The results of the studies conducted by these directors and their associates have been embodied in a series of reports. The approximate dates at which these will be available for distribution are:

Volume I. **Rural School Survey of New York State.** (Preliminary Report) May, 1922.

Volume II. **Administration and Supervision,** October, 1922.
The District System. Shelby.
The Supervisory District. Brooks.
The Community Unit. Works.
Principles of Administration. Bobbitt.
The State System of Examinations. Kruse.
Health Education. Peterson.
The State Schools of Agriculture. Holton.
Junior Extension. Holton.
Summary and Recommendations. Judd.

Volume III. **School Support.** Updegraff. August, 1922.

Volume IV. **Teachers and Teacher Preparation.** Bagley. September, 1922.
Elementary School Curriculum. Brim.
Community Relations. Carney.

Volume V. **School Buildings.** Butterworth. June, 1922.

Volume VI. **The Educational Product.** Haggerty. July, 1922.

Volume VII. **The Rural High Schools.** Ferriss. August, 1922.
(The administrative features of the high school were studied in coöperation with Dr. Judd, while teachers and curricula were developed under the general direction of Dr. Bagley.)

Volume VIII. **Vocational Education.** Eaton. July, 1922.
(Prepared under the direction of Dr. Bagley.)

These volumes may be obtained at seventy-five cents each, postpaid, except Volume II, on Administration and Supervision, which will be one dollar. Only a limited edition will be printed and those wishing to make certain of securing copies may place their orders at any time.

Joint Committee on Rural Schools,
Ithaca, N. Y.